

WEST[Help](#)[Logout](#)[Interrupt](#)[Main Menu](#)[Search Form](#)[Posting Counts](#)[Show S Numbers](#)[Edit S Numbers](#)[Preferences](#)

Your wildcard search against 2000 terms has yielded the results below

Search for additional matches among the next 2000 terms

starting with: COP\$(COPLD).P27-P83.

Search Results -

Terms	Documents
122 and second same cop\$	4

Database:

US Patents Full Text Database
JPO Abstracts Database
EPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

Refine Search:**Clear****Search History****Today's Date: 9/25/2000**

<u>DB Name</u>	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u>
USPT	122 and second same cop\$	4	<u>L23</u>
USPT	121 and second database	4	<u>L22</u>
USPT	111 and first copy\$	8	<u>L21</u>
USPT	119 and backup adj database	23	<u>L20</u>
USPT	((707/204)!.CCLS.)	296	<u>L19</u>
USPT	117 and document same format	4	<u>L18</u>
USPT	116 and attribute	15	<u>L17</u>
USPT	114 and backup same database	59	<u>L16</u>
USPT	112 and backup same database	21	<u>L15</u>
USPT	111 and second adj database or destination adj database	597	<u>L14</u>
USPT	112 and attribute	3	<u>L13</u>
USPT	111 and backup adj database	21	<u>L12</u>
USPT	source adj database or first adj database	881	<u>L11</u>
USPT	19 and backup adj database	11	<u>L10</u>
USPT	distributed adj database	749	<u>L9</u>
USPT	17 and recovery	13	<u>L8</u>
USPT	16 and backup adj database	17	<u>L7</u>
USPT	first adj database	708	<u>L6</u>
USPT	14 and attribute	162	<u>L5</u>
USPT	13 and archive or backup database	382	<u>L4</u>
USPT	document same format	5262	<u>L3</u>
USPT	11 and document same attribute	3	<u>L2</u>
USPT	backup adj database or backup adj data adj base	117	<u>L1</u>

WEST

Your wildcard search against 2000 terms has yielded the results below

Search for additional matches among the next 2000 terms

Generate Collection

Search Results - Record(s) 1 through 4 of 4 returned.

☐ 1. Document ID: US 6069952 A

L23: Entry 1 of 4

File: USPT

May 30, 2000

US-PAT-NO: 6069952

DOCUMENT-IDENTIFIER: US 6069952 A

TITLE: Data copyright management system

DATE-ISSUED: May 30, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Saito; Makoto	Tokyo	N/A	N/A	JPX
Momiki; Shunichi	Tokyo	N/A	N/A	JPX

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Mitsubishi Corporation	Tokyo	N/A	N/A	JPX	03

APPL-NO: 8/ 536747

DATE FILED: September 29, 1995

FOREIGN-APPL-PRIORITY-DATA:

COUNTRY	APPL-NO	APPL-DATE
JP	6-237673	September 30, 1994
JP	6-264199	October 27, 1994
JP	6-269959	November 2, 1994

INT-CL: [7] H04K 1/00, H04L 9/08

US-CL-ISSUED: 380/4; 380/21

US-CL-CURRENT: 705/57; 380/279

FIELD-OF-SEARCH: 380/4, 380/21

REF-CITED:

U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>5291598</u>	March 1994	Grundy	395/650
<u>5319705</u>	June 1994	Halter et al.	380/4
<u>5369702</u>	November 1994	Shanton	380/4
<u>5410602</u>	April 1995	Finkelstein et al.	380/21
<u>5465299</u>	November 1995	Matsumoto et al.	380/23
<u>5636277</u>	June 1997	Nagahama	380/4
<u>5646999</u>	July 1997	Saito	380/25
<u>5651064</u>	July 1997	Newell	380/4

Harn, Lein, et al., "Software Authentication System for Information Integrity," Computers & Security International Journal Devoted to the Study of Technical and Financial Aspects of Computer Security, vol. 11, Dec. 1, 1992, pp. 747-752, XP000332279.

ART-UNIT: 276

PRIMARY-EXAMINER: Laufer; Pinchus M.

ASSISTANT-EXAMINER: Sayadian; Hrayr A.

ATTY-AGENT-FIRM: Armstrong, Westerman, Hattori, McLeland & Naughton

ABSTRACT:

A data copyright management system comprises a database for storing original data, a key control center for managing crypt keys, copyright management center for managing data copyrights, and a communication network for connecting these sections. Data supplied from the database to users is encrypted and distributed. The users decrypts the encrypted data by crypt keys obtained from the key control center or copyright management center. To supply data to users, there are the following two methods: a one-way supplying of encrypted data to users by means of broadcasting or the like; and two-way supplying of encrypted data to users corresponding to users' requests. A crypt key system used for encrypting data uses a secret-key cryptosystem, a public-key cryptosystem or a cryptosystem combining a secret-key and a public-key and further uses a copyright control program to control data copyrights. When a user stores, copies, or transfers data, the data is encrypted by a crypt key different from a crypt key used for supplying the data. The former crypt key is supplied from the key control center or from the copyright management center, or generated by the copyright control program. The present invention can be applied to a data copyright management system for using not only single data but also a plurality of data supplied from a single database or a plurality of data supplied from a plurality of databases. Further, an apparatus to be used by the user to perform data copyright management is proposed.

24 Claims, 10 Drawing figures

Full	Title	Abstract	Front	Review	Classification	Date	Reference	Claims	RMK	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	-----	-----------	-------

☐ 2. Document ID: US 5539658 A

L23: Entry 2 of 4

File: USPT

Jul 23, 1996

US-PAT-NO: 5539658

DOCUMENT-IDENTIFIER: US 5539658 A

TITLE: Electronic presentation system using portable storage media

DATE-ISSUED: July 23, 1996

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
McCullough; Timothy L.	Mahtomedi	MN	N/A	N/A

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Minnesota Mining and Manufacturing Company	St. Paul	MN	N/A	N/A	02

APPL-NO: 8/ 442012

DATE FILED: May 16, 1995

INT-CL: [6] H04N 7/15

US-CL-ISSUED: 364/514A; 348/12

US-CL-CURRENT: 345/329; 348/12

FIELD-OF-SEARCH: 364/514C, 364/514A, 359/148, 348/12, 348/13, 395/600

REF-CITED:

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>4939509</u>	July 1990	Bartholomew et al.	N/A
<u>5191410</u>	March 1993	McCalley et al.	348/13
<u>5204768</u>	April 1993	Tsakihs et al.	359/148
<u>5208665</u>	May 1993	McCalley et al.	348/12

OTHER PUBLICATIONS

Harvard.RTM. Spotlight 2.0 brochure for Windows.RTM. and Windows '95.RTM., Software Publishing Corporation, Santa Clara, CA, 2 pages, No Date.
 EZShow Systems Inc. advertisement entitled "It was not possible with PowerPoint.RTM. Just add EZTools and you can do it!!!" (1 page).
 "The Wavelet Packet Transform," M. Cody, Dr. Dobb's Journal, Apr. 1994, pp. 44-54, 100.
 "AT&T VoiceSpan.TM.: A Powerful, Personal Technology For Simultaneous Voice-and-Data Communication," VoiceSpan Technology, While Paper, presented by AT&T Paradyne Multimedia Products, Sep. 1994, pp. 1-7.
 "If we can teach an ordinary phone line how to walk and chew gum at the same time, you can teach it to dance," AT&T VocieSpan.TM. Advertisement.
 "`VoiceView` exchanges voice and data in a single phone call," P.C. Letter, Info World Publishing Inc., Feb. 28, 1994, v10, n4 p. 1(1).
 "The Fast Wavelet Transform," M. Cody, Dr. Dobb's Journal, Apr. 1992, pp. 16-18, 23-24, 26, 28, 100-101.
 Future Labs, Inc., Brochure on TALKShow.RTM. software product.
 "DataPort.TM. 2001," AT&T VoiceSpan Advertisement, 1993, No. DIL-FO20-2-1293.
 "The DSP breakthrough is music to our ears," N. Nicholaisen, Computer Shopper, Oct. 1993, v13, n10, p. 570(4).
 Catalogue/Brochure of multimedia software products, 2 pages.

ART-UNIT: 244

PRIMARY-EXAMINER: Voeltz; Emanuel T.

ASSISTANT-EXAMINER: Peeso; Thomas

ATTY-AGENT-FIRM: Griswold; Gary L. Kirn; Walter N. Levinson; Eric D.

ABSTRACT:

A method of facilitating electronic presentations using portable storage media. An array of images to be displayed to an audience is converted into a database and stored on the presenter's computer hard drive. A copy of the image database is transferred to a portable storage medium, such as a personal computer (PC) card, which is then inserted into a display device such as a liquid crystal display (LCD) panel equipped to accept a PC card. When the presenter selects which image is to be displayed to the audience, the selection is communicated to the LCD panel which displays the corresponding image in the database copy on the PC card for viewing by the audience. The present invention also includes a system for giving electronic presentations.

10 Claims, 1 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-----------	-------

☐ 3. Document ID: US 4939668 A

L23: Entry 3 of 4

File: USPT

Jul 3, 1990

US-PAT-NO: 4939668

DOCUMENT-IDENTIFIER: US 4939668 A

TITLE: System for designing intercommunications networks

DATE-ISSUED: July 3, 1990

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Brown; George T.	Apalachin	NY	N/A	N/A
Millis; David B.	Friendsville	PA	N/A	N/A
Reynolds; Paul R.	Morrisville	NC	N/A	N/A
Nowak; Ronald P.	Endicott	NY	N/A	N/A

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
International Business Machines Corp.	Armonk	NY	N/A	N/A	02

APPL-NO: 7/ 089201

DATE FILED: August 24, 1987

INT-CL: [5] G06F 15/46

US-CL-ISSUED: 364/513; 364/468, 364/200, 364/275.6, 364/274.5, 364/900, 364/917.96, 364/972.3

US-CL-CURRENT: 706/59; 700/103, 706/919, 706/921

FIELD-OF-SEARCH: 364/468, 364/512, 364/513, 364/191-193, 364/300, 364/2MSFile, 364/9MSFile

REF-CITED:

U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>4135240</u>	January 1979	Ritchie	364/200
<u>4422158</u>	December 1983	Galie	364/900
<u>4591983</u>	May 1986	Bennett et al.	364/403
<u>4648044</u>	March 1987	Hardy et al.	364/513
<u>4658370</u>	April 1987	Erman et al.	364/513
<u>4700317</u>	October 1987	Watanabe et al.	364/512 X

OTHER PUBLICATIONS

Forgue-"Think Large Scale Cad/Cam with Telecommunications", Mesures, vol. 52, No. 2, 23 Feb. 1987, pp. 33-34.

"Cadam Interactive User Manual"-vol. 1 (SH 20-6509)-Jan. 1985 and vol. 2 (SH 20-6510)-Jan. 1985-IBM Corporation.

"Catia 3D Design User Manual"-SH20-7069-Jul. 1986-IBM Corporation.

"Catia Base User Manual"-SH 20-6912-Jan. 1987-IBM Corporation.

"Interactive System Productivity Facility"-SC34-2008-Mar. 1985, IBM Corporation.

"CMS Users Guide"-SC19-6210-Dec. 86-IBM Corporation.

"Mus/Extended Architecture Overview"-GC28-1348, Mar. 1984, IBM Corporation.

"OS/US2 TSo Terminal User's Guide"-GC28-0645-Jun. 1978-IBM Corporation.

Siewurer et al-"Computer Structures: Principles and Examples"-Chapter 32-The IBM System 138/A High Level Machine-McGraw-Hill, 1982-pp. 533-550.

ART-UNIT: 236

PRIMARY-EXAMINER: Ruggiero; Joseph

ATTY-AGENT-FIRM: Samodovitz; Arthur J. Bee; Richard E. Bouchard; John H.

ABSTRACT:

A system for designing an intercommunication network among a plurality of devices. The system includes a device for storing rules to meet design requirements and a mechanism connected to the device for storing rules in order to revise the rules dynamically. Also provided is a device for storing data and a mechanism connected to the device for storing data in order to revise the data. A requestor has the ability to access all rules and to revise a portion of the data. Moreover, a designer has the ability to access all rules and to revise another portion of the data, which portion has at least one subportion that cannot be revised by the requestor.

22 Claims, 32 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWC	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	-----	-----------	-------

☐ 4. Document ID: US 4928233 A

L23: Entry 4 of 4

File: USPT

May 22, 1990

US-PAT-NO: 4928233

DOCUMENT-IDENTIFIER: US 4928233 A

TITLE: System for providing three dimensional object descriptions

DATE-ISSUED: May 22, 1990

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Millis; David B.	Friendsville	PA	N/A	N/A

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
International Business Machines	Armonk	NY	N/A	N/A	02

APPL-NO: 7/ 088925

DATE FILED: August 24, 1987

INT-CL: [5] G06F 15/62

US-CL-ISSUED: 364/522; 364/521, 364/512

US-CL-CURRENT: 345/419

FIELD-OF-SEARCH: 364/522, 364/521, 364/512, 364/518, 340/747, 340/750, 340/721, 340/731, 340/730, 340/729, 340/734, 340/724

REF-CITED:

U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>3867616</u>	February 1975	Korelitz et al.	235/151.1
<u>4384338</u>	May 1983	Bennett	364/522
<u>4532605</u>	July 1985	Waller	364/900
<u>4549275</u>	October 1985	Sukonick	364/521
<u>4674046</u>	June 1987	Ozeki et al.	364/414
<u>4685070</u>	August 1987	Flichbaugh	364/522
<u>4700318</u>	October 1987	Ockman	364/518
<u>4710806</u>	December 1987	Iwai et al.	358/81
<u>4723209</u>	February 1988	Heznandez et al.	364/300
<u>4736306</u>	April 1988	Christensen et al.	364/513
<u>4819192</u>	April 1989	Kuragano et al.	364/522

OTHER PUBLICATIONS

Koparkar, P. A., "Computational Techniques for Processing Parametric Surfaces", Computer Vision, Graphics, and IP 28, 1984, pp. 303-322.
Gassan, Peter C., "Geometry of Spatial Forms", Ellis Horwood Limited--Publishers 1983, pp. 482-505.

ART-UNIT: 231

PRIMARY-EXAMINER: Harkcom; Gary V.

ASSISTANT-EXAMINER: Nguyen; Phu K.

ATTY-AGENT-FIRM: Levy; Mark Bee; Richard E.

ABSTRACT:

A system for producing human readable physical data in text form from geometric data in mathematical form that partially describes a three dimensional object. A first database is provided that contains geometric data in mathematical form representative of the shape

of the object. A second database contains physical data in text form. At least a portion of the data in the first database can be extracted and used as the basis for calculations of physical data in mathematical form, which can be converted into human readable physical data in text form. The resulting physical data can be merged with data from the second database to produce a complete geometric description in text of the object. The present invention also contemplates a mechanism for using empirical data with a knowledge based system. The knowledge based system can be used to modify the physical data to adapt geometric properties to a manufacturing process.

16 Claims, 32 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWC	Draw. Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	-----	------------	-------

Generate Collection

Terms	Documents
122 and second same cop\$	4

Display

40

Documents, starting with Document:

4

Display Format:

FRO

Change Format

WEST

Generate Collection

Search Results - Record(s) 1 through 13 of 13 returned.☐ 1. Document ID: US 6122630 A

L8: Entry 1 of 13

File: USPT

Sep 19, 2000

US-PAT-NO: 6122630

DOCUMENT-IDENTIFIER: US 6122630 A

TITLE: Bidirectional database replication scheme for controlling ping-ponging

DATE-ISSUED: September 19, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Strickler; Gary E.	Pottstown	PA	N/A	N/A
Knapp; Herbert William	Wayne	PA	N/A	N/A
Holenstein; Bruce D.	Media	PA	N/A	N/A
Holenstein; Paul J.	Downington	PA	N/A	N/A

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
ITI, Inc.	Paoli	PA	N/A	N/A	02

APPL-NO: 9/ 328257

DATE FILED: June 8, 1999

INT-CL: [7] G06F 17/30, G06F 7/00

US-CL-ISSUED: 707/8; 707/10, 709/238

US-CL-CURRENT: 707/8; 707/10, 709/238

FIELD-OF-SEARCH: 707/8, 707/1, 707/9, 707/10, 707/104, 707/201, 707/203, 707/204, 707/202, 709/208, 709/230, 709/232, 709/238, 714/1, 714/15, 714/20

REF-CITED:

U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>5036518</u>	July 1991	Tseung	371/32
<u>5276871</u>	January 1994	Howarth	N/A
<u>5579318</u>	November 1996	Reuss et al.	N/A
<u>5615364</u>	March 1997	Marks	N/A
<u>5680573</u>	October 1997	Rubin et al.	N/A
<u>5710922</u>	January 1998	Alley et al.	N/A
<u>5721915</u>	February 1998	Sockut et al.	N/A
<u>5721916</u>	February 1998	Pardikar	N/A
<u>5721918</u>	February 1998	Nilsson et al.	N/A
<u>5737601</u>	April 1998	Jain et al.	N/A
<u>5740433</u>	April 1998	Carr et al.	N/A
<u>5745753</u>	April 1998	Mosher, Jr.	N/A
<u>5757669</u>	May 1998	Christie et al.	N/A
<u>5758150</u>	May 1998	Bell et al.	N/A
<u>5781910</u>	July 1998	Gostanian et al.	N/A
<u>5794252</u>	August 1998	Bailey et al.	N/A
<u>5799306</u>	August 1998	Sun et al.	N/A
<u>5799322</u>	August 1998	Mosher, Jr.	N/A
<u>5799323</u>	August 1998	Mosher, Jr. et al.	N/A
<u>5806075</u>	September 1998	Jain et al.	N/A
<u>5832203</u>	November 1998	Putzolu et al.	N/A
<u>5835915</u>	November 1998	Carr et al.	N/A
<u>5884325</u>	March 1999	Bauer et al.	N/A
<u>5884328</u>	March 1999	Mosher, Jr.	N/A
<u>5924096</u>	July 1999	Draper et al.	N/A
<u>5970488</u>	October 1999	Crowe et al.	707/8
<u>5991771</u>	November 1999	Falls et al.	707/202
<u>6012059</u>	July 1991	Neimat et al.	707/8

OTHER PUBLICATIONS

Bodin et al, "Evaluating Two Loop Transformations for Reducing Multiple Writer False Sharing", 7th Annual Workshop on Languages and Compiler for Parallel Computing, New York, Aug. 1994.

ART-UNIT: 271

PRIMARY-EXAMINER: Black; Thomas G.

ASSISTANT-EXAMINER: Le; Uyen

ATTY-AGENT-FIRM: Akin, Gump, Strauss, Hauer & Feld, L.L.P.

ABSTRACT:

Transaction ping-pong is selectively prevented in a bidirectional database replication system. The system has a plurality of nodes connected via communication media in a topology. Each node includes a database and a transaction transmitter or collector which sends transactions posted to the database to a database at one or more other nodes for replication in the databases of the one or more other nodes. All transactions to be posted to databases in remote nodes that were sent by a local node are detected, and the database at the local node is inhibited from posting selective transactions which were detected as being originally sent by the local node.

99 Claims, 19 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWC	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	-----	-----------	-------

☐ 2. Document ID: US 5953662 A

L8: Entry 2 of 13

File: USPT

Sep 14, 1999

US-PAT-NO: 5953662

DOCUMENT-IDENTIFIER: US 5953662 A

TITLE: Dual home location registers in a mobile radio system

DATE-ISSUED: September 14, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Lindquist; Jan	Aachen	N/A	N/A	DEX
Macdermott; Simon	Guildford	N/A	N/A	GBX
Medrano; Cuauhtemoc	Saltillo	N/A	N/A	MXX
Pavon; Gustavo	Plano	TX	N/A	N/A

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Ericsson, Inc.	Research Triangle	NC	N/A	N/A	02 Park

APPL-NO: 8/ 640339

DATE FILED: April 30, 1996

PARENT-CASE:

CROSS REFERENCE TO RELATED APPLICATION This Application is related to a application for patent, Ser. No. 08/372,074, filed Jan. 12, 1995 now U.S. Pat. No. 5,623,532 issued Apr. 22, 1997.

INT-CL: [6] H04Q 7/22, H04Q 7/24, H04Q 7/36

US-CL-ISSUED: 455/433; 455/432, 455/435, 455/437, 455/560

US-CL-CURRENT: 455/433; 455/432, 455/435, 455/437, 455/560

FIELD-OF-SEARCH: 455/432, 455/433, 455/435, 455/437, 455/408, 455/414, 455/412, 455/406, 455/550, 455/555, 455/554, 455/560, 455/453, 455/436

REF-CITED:

U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>5278890</u>	January 1994	Beeson, Jr. et al.	379/57
<u>5289179</u>	February 1994	Beeson, Jr. et al.	340/826
<u>5400390</u>	March 1995	Salin	379/59
<u>5457736</u>	October 1995	Cain et al.	379/60
<u>5479481</u>	December 1995	Koivunen	379/59
<u>5623532</u>	April 1997	Houde et al.	455/433
<u>5732127</u>	March 1998	Hayes	455/408
<u>5761500</u>	June 1998	Gallant et al.	455/433

FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY
95306209	June 1995	EPX
PCT/SE94/00247	March 1993	WOX
WO 93/25051	December 1993	WOX
WO 94/23506	October 1994	WOX
WO009428688A1	December 1994	WOX

ART-UNIT: 276

PRIMARY-EXAMINER: Chin; Wellington

ASSISTANT-EXAMINER: Ferguson; Keith

ATTY-AGENT-FIRM: Jenkins & Gilchrist, P.C.

ABSTRACT:

A pair of home location registers (HLRs) are associated with each other by assigning two capability codes. A first capability code is utilized to provide system support by one of the HLRs whenever the other HLR fails. The second capability code is utilized to constantly update each other's database with the latest subscriber information. Whenever a particular HLR fails, the associated Signal Transfer Points (STPs) reroutes the incoming signals intended for that failed HLR to its mate HLR. The mate HLR compares the received signals' destination point code with its first capability code to determine whether it is allowed to process this signal. If there is a match, the mate HLR automatically and transparently processes the received signal without service interruption or delay. Whenever one of the HLRs receives a new subscriber data, the same data are communicated to the other HLR by using its second capability code as the destination address.

36 Claims, 7 Drawing figures

Full	Title	Creation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-----------	-------

☒ 3. Document ID: US 5799322 A

L8: Entry 3 of 13

File: USPT

Aug 25, 1998

US-PAT-NO: 5799322

DOCUMENT-IDENTIFIER: US 5799322 A

TITLE: System and method for stopping updates at a specified timestamp in a remote duplicate database facility

DATE-ISSUED: August 25, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Mosher, Jr.; Malcolm	Los Gatos	CA	N/A	N/A

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Tandem Computer, Inc.	Cupertino	CA	N/A	N/A	02

APPL-NO: 8/ 790542

DATE FILED: January 30, 1997

PARENT-CASE:

This application is a continuation-in-part of application Ser. No. 08/761,725, now pending, filed Dec. 6, 1996, which was a continuation in part of application Ser. No. 08/704,111, filed Aug. 28, 1996, now U.S. Pat. No. 5,740,433, which was a continuation of application Ser. No. 08/377,152, filed Jan. 24, 1995, now abandoned.

INT-CL: [6] G06F 17/30

US-CL-ISSUED: 707/202; 707/201, 707/204, 395/182.14

US-CL-CURRENT: 707/202; 707/201, 707/204, 714/16

FIELD-OF-SEARCH: 707/201, 707/202, 707/204, 395/182.14

REF-CITED:

U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>5740433</u>	April 1998	Carr et al.	707/202

OTHER PUBLICATIONS

Jorge Guerrero, "RDF: An Overview", Tandem Systems Review, Oct. 1991, pp. 34-43.
Wouter Senf, et al., "RDF Synchronization", Tandem Systems Review, Summer 1992, pp. 6-23.

ART-UNIT: 271

PRIMARY-EXAMINER: Lintz; Paul R.

PRIMARY-EXAMINER: Lintz, Paul R.

ATTY-AGENT-FIRM: Williams, Gary S. Flehr Hohbach Test Albritton & Herbert

ABSTRACT:

A primary computer system has a database, application programs that modify the local database, and a transaction manager that stores audit records in a local audit trail reflecting those application program modifications to the local database. A plurality of parallel backup systems are used to provide "triple contingency protection" of the data on the primary computer system. However, if the primary system suffers a sudden catastrophic failure, the parallel backup systems will generally be left in inconsistent states. To restart the application programs on one of the backup system, the parallel backup are first synchronized with each other, and then transaction processing is restarted with one of the backup systems as the new primary system, and the other backup systems as the backups to the new primary system. In addition, in order to enable any single backup system's database to be brought into a self consistent state, backup volume Updaters are stopped after database updates for all transactions committed on the primary system before a specified time have been completely applied to the backup system's database. After any reports requiring a self consistent database have been generated, operation of the Updaters is resumed.

4 Claims, 47 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	INWC	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-----------	-------

☐ 4. Document ID: US 5687322 A

L8: Entry 4 of 13

File: USPT

Nov 11, 1997

US-PAT-NO: 5687322

DOCUMENT-IDENTIFIER: US 5687322 A

TITLE: Method and system for selective incentive point-of-sale marketing in response to customer shopping histories

DATE-ISSUED: November 11, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Deaton; David W.	Abilene	TX	N/A	N/A
Gabriel; Rodney G.	Abilene	TX	N/A	N/A

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Credit Verification Corporation	Abilene	TX	N/A	N/A	02

APPL-NO: 8/ 457300

DATE FILED: June 1, 1995

PARENT-CASE:

RELATED APPLICATIONS This application is a continuation of U.S. application Ser. No. 08/139,983, filed Oct. 20, 1993 and entitled "Method and System for Selective Incentive Point-of-Sale Marketing in Response to Customer Shopping Histories", abandoned, which is a continuation-in-part of U.S. application Ser. No. 08/096,921, filed Jul. 23, 1993, which is a continuation-in-part of U.S. application Ser. No. 08/063,413, filed May 17, 1993, U.S. Pat. No. 5,621,817, which is a continuation of U.S. application Ser. No. 07/886,383, filed May 19, 1992, abandoned, which is a continuation-in-part of U.S. application Ser. No. 07/826,255, filed Jan. 24, 1992, abandoned, which is a continuation of U.S. application Ser. No. 07/345,475, filed May 1, 1989, abandoned. This application also relates to U.S. application Ser. No. 07/885,649, filed May 19, 1992, now U.S. Pat. No. 5,237,620, issued Aug. 17, 1993; U.S. application Ser. No. 07/886,382, filed May 19, 1992, now U.S. Pat. No. 5,305,196, issued Apr. 19, 1994; U.S. application Ser. No. 07/886,385, filed May 19, 1992, now U.S. Pat. No. 5,201,010, issued Apr. 6, 1993; U.S. application Ser. No. 08/016,991, filed Feb. 10, 1993, now U.S. Pat. No. 5,327,508 issued Jul. 5, 1994; U.S. application Ser. No. 08/117,951, filed Aug. 30, 1993; U.S. application Ser. No. 08/134,071, filed Oct. 8, 1993; U.S. application Ser. No. 08/141,471, filed Oct.

20, 1993; U.S. application Ser. No. 08/177,690, filed Jan. 1, 1994, now U.S. Pat. No. 5,388,165, issued Feb. 7, 1995; U.S. application Ser. No. 08/178,056, filed Feb. 28, 1994; U.S. application Ser. No. 08/178,052, filed Jan. 4, 1994; U.S. application Ser. No. 08/221,622, filed Mar. 30, 1994, now U.S. Pat. No. 5,448,471 issued Sep. 5, 1995; U.S. application Ser. No. 08/302,521, filed Sep. 6, 1994; U.S. application Ser. No. 08/303,631, filed Sep. 8, 1994; U.S. application Ser. No. 08/336,880, filed Nov. 9, 1994, now U.S. Pat. No. 5,430,644 issued Jul. 4, 1995; U.S. application Ser. No. 08/429,938 filed Jun. 3, 1995; U.S. application Ser. No. 08/457,786 filed Jun. 1, 1995; U.S. application Ser. No. 08/456,462 filed Jun. 1, 1995; U.S. application Ser. No. 08/457,231 filed Jun. 1, 1995; U.S. application Ser. No. 08/457,230 filed Jun. 1, 1995; U.S. application Ser. No. 08/457,230 filed Jun. 1, 1995; U.S. application Ser. No. 08/456,458 filed Jun. 1, 1995; U.S. application Ser. No. 08/456,340 filed Jun. 1, 1995; U.S. application Ser. No. 08/458,172 filed Jun. 1, 1995; U.S. application Ser. No. 08/457,299, filed Jun. 1, 1995; and U.S. application Ser. No. 08/458,786, filed Jun. 1, 1995, pending.

INT-CL: [6] G06F 17/60

US-CL-ISSUED: 395/214

US-CL-CURRENT: 705/14

FIELD-OF-SEARCH: 235/375, 235/381, 235/383, 395/214, 395/221

REF-CITED:

U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>3959624</u>	May 1976	Kaslow	235/61.11E.
<u>4554446</u>	November 1985	Murphy et al.	235/487
<u>4670853</u>	June 1987	Stepien	364/70
<u>4672572</u>	June 1987	Alsberg	364/900
<u>4674041</u>	June 1987	Lemon et al.	364/401
<u>4723212</u>	February 1988	Mindrum et al.	364/401
<u>4750119</u>	June 1988	Cohen et al.	364/401
<u>4791281</u>	December 1988	Johnsen et al.	235/383
<u>4821186</u>	April 1989	Munakata et al.	364/405
<u>4833308</u>	May 1989	Humble	235/383
<u>4882675</u>	November 1989	Nichtberger et al.	364/401
<u>4908761</u>	March 1990	Tai	364/401
<u>4910672</u>	March 1990	Off et al.	364/405
<u>4941090</u>	July 1990	McCarthy	364/405
<u>4949256</u>	August 1990	Humble	364/401
<u>4982346</u>	January 1991	Girouard et al.	364/550
<u>5010485</u>	April 1991	Bigari	364/408
<u>5025372</u>	June 1991	Burton et al.	364/406
<u>5053955</u>	October 1991	Peach et al.	364/401
<u>5056019</u>	October 1991	Schultz et al.	364/405
<u>5091634</u>	February 1992	Finch et al.	235/375
<u>5128520</u>	July 1992	Rando et al.	235/375
<u>5173851</u>	December 1992	Off et al.	364/401
<u>5179375</u>	January 1993	Dick et al.	340/825
<u>5185695</u>	February 1993	Pruchnicki	364/401
<u>5201010</u>	April 1993	Deaton et al.	382/7
<u>5245533</u>	September 1993	Marshall et al.	364/401
<u>5249044</u>	September 1993	Von Kohorn	358/86

FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY
5547560 (A)	0000	JPX

OTHER PUBLICATIONS

Article, Direct Marketing, v53, n9, Jan. 1991, Neal, Quaker's direct hit. (Quaker Oats

Co.'s advertising subsidiary (Quaker Direct), pp. 1-5.

"Front End Electronic Marketing Frequent Shopper & Other Programs" Food Marketing Institute, 1991, Carlene A. Thissen.

"Perspectives on Electronic Marketing with Emphasis on Promotion Inside Supermarkets", Food Marketing Institute, 1990, Carlene A. Thissen.

"What's New in Supermarket Promotion", New York Times, Jun. 18, 1989, Lynette D. Hazelton.

"In this Computer Age, Who Needs Coupons", New York Times, Jun. 15, 1989, Michael Freitag.

Progressive Grocer, vol. 66, No. 5, May 1987, pp. 133-134, 136, Ronald Tanner.

Lena H. Sun, "Checking Out The Customer," The Washington Post, Sunday, Jul. 9, 1989.

"A New Dimension in Marketing," Progressive Grocer, vol. 66, No. 5, May 1987, pp. 133-136.

"UKROP's Test Data Base Marketing Program Electronic Couponing Tracks Buying Behavior of Valued Customers", Chain Store Dye Executive, Sep., 198.

"Grocery Stores Copu Airlines w/ Frequent Flyer Bonuses", Wall Street Journal 3 Star, Eastern, Aug. 7, 1986.

"S&H, Soffer Reeceard Frequent Shoppers", Advertising Age, Mar. 16, 1987, p. 22.

"Frequent Buyer Programs Get Off the Ground", Dairy Foods, Nov. 1989, p. 64.

"Giant to Test Supermarket Cash Rebates", Washington Post, Jun. 14, 1989, pp. A1, A32.

ART-UNIT: 235

PRIMARY-EXAMINER: Harvey; Jack B.

ASSISTANT-EXAMINER: Chung-Trans; Xuong

ATTY-AGENT-FIRM: Baker & Botts, L.L.P.

ABSTRACT:

A system and method is disclosed for customer promotion. A terminal enters a customer's identification code, along with customer transaction data, at the point-of-sale. A memory stores a database of previously entered customer identification codes and transactions data. Circuitry is provided for generating a signal representative of a customer's shopping history, wherein incentive coupons may be issued to customers in dependence upon the signal.

17 Claims, 75 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWD	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	-----	-----------	-------

☐ 5. Document ID: US 5649114 A

L8: Entry 5 of 13

File: USPT

Jul 15, 1997

US-PAT-NO: 5649114

DOCUMENT-IDENTIFIER: US 5649114 A

TITLE: Method and system for selective incentive point-of-sale marketing in response to customer shopping histories

DATE-ISSUED: July 15, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Deaton; David W.	Abilene	TX	N/A	N/A
Gabriel; Rodney G.	Abilene	TX	N/A	N/A

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Credit Verification Corporation	Abilene	TX	N/A	N/A	02

APPL-NO: 8/ 457299

DATE FILED: June 1, 1995

PARENT-CASE:

RELATED APPLICATIONS This application is a continuation of U.S. application Ser. No.

08/139,983, filed Oct. 1993 and entitled "Method and System for Selective Incentive Point-of-Sale Marketing in Response to Customer Shopping Histories", abandoned, which is a continuation-in-part of U.S. application Ser. No. 08/096,921, filed Jul. 23, 1993, pending, which is a continuation-in-part of U.S. application Ser. No. 08/063,413, filed May 17, 1993, U.S. Pat. No. 5,621,812, which is a continuation of U.S. application Ser. No. 07/886,383, filed May 19, 1992, abandoned, which is a continuation-in-part of U.S. application Ser. No. 07/826,255, filed Jan. 24, 1992, abandoned, which is a continuation of U.S. application Ser. No. 07/345,475, filed May 1, 1989, abandoned.

INT-CL: [6] G06F 17/60

US-CL-ISSUED: 395/214

US-CL-CURRENT: 705/14

FIELD-OF-SEARCH: 235/375, 235/381, 235/383, 395/214, 395/221

REF-CITED:

U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>3959624</u>	May 1976	Kaslow	235/61.11E
<u>4109238</u>	August 1978	Creekmore	340/149A
<u>4554446</u>	November 1985	Murphy et al.	235/487
<u>4670853</u>	June 1987	Stepien	364/70
<u>4674041</u>	June 1987	Lemon et al.	364/401
<u>4723212</u>	February 1988	Mindrum et al.	364/401
<u>4748668</u>	May 1988	Shamir et al.	380/30
<u>4750119</u>	June 1988	Cohen et al.	364/401
<u>4791281</u>	December 1988	Johnsen et al.	235/383
<u>4821186</u>	April 1989	Munakata et al.	364/405
<u>4882675</u>	November 1989	Nichtberger et al.	364/401
<u>4908761</u>	March 1990	Tai	364/401
<u>4910672</u>	March 1990	Off et al.	364/405
<u>4941090</u>	July 1990	McCarthy	364/405
<u>4949256</u>	August 1990	Humble	364/401
<u>4982346</u>	January 1991	Girouard et al.	364/550
<u>5010485</u>	April 1991	Bigari	364/408
<u>5053955</u>	October 1991	Peach et al.	364/401
<u>5056019</u>	October 1991	Schultz et al.	364/405
<u>5091634</u>	February 1992	Finch et al.	235/375
<u>5128520</u>	July 1992	Rando et al.	235/375
<u>5173851</u>	December 1992	Off et al.	364/401
<u>5179375</u>	January 1993	Dick et al.	340/825
<u>5185695</u>	February 1993	Pruchnicki	364/401
<u>5201010</u>	April 1993	Deaton et al.	382/7
<u>5245533</u>	September 1993	Marshall	364/401
<u>5249044</u>	September 1993	Von Koborn	358/86

FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY
5547560A	0000	JPX

OTHER PUBLICATIONS

Article, Direct Marketing, v53, n9, Jan. 1991, Neal, Quaker's direct hit. (Quaker Oats Co.'s advertising subsidiary Quaker Direct), pp. 1-5.
"Front End Electronic Marketing Frequent Shopper & Other Programs" Food Marketing Institute, 1991, Carlene A. Thissen.
"Perspectives on Electronics Marketing with Emphasis on Promotion Inside Supermarkets", Food Marketing Institute, 1990, Carlene A. Thissen.
"What's New in Supermarket Promotion", New York Times, Jun. 18, 1989, Lynette D. Hazelton.
"In this Computer Age, Who Needs Coupons", New York Times, Jun. 15, 1989, Michael

Freitag.

Progressive Grocer, vol. 66, No. 5, May 1987, pp. 133-134, 136, Ronald Tanner.

Less H. Sun, "Checking Out The Customer", The Washington Post, Sunday, Jul. 9, 1989.

"A New Dimension in Marketing," Progressive Grocer, vol. 66, No. 5, May 1987, pp.

133-136.

"UKROP's Test Data Base Marketing Program Electronic Couponing Tracks Buying Behavior of Valued Customers", Chain Store Age Executive, Sep. 1987.

"Grocery Stores Copies Airlines a Frequent Flyer Bonuses", Wall Street Journal & Stoh, Eastera, Aug. 7, 1986.

"S&H, Soffer Reece and Frequent Shoppers", Advertising Age, Mar. 16, 1987, p. 22.

"Frequent Buyer Programs Get off the Ground", Dairy Foods, Nov. 1989, p. 64.

"Giant to List Supermarket Cash Rebates", Washington Post, Jun. 14, 1989, pp. A1,A32.

ART-UNIT: 235

PRIMARY-EXAMINER: Harvey; Jack B.

ASSISTANT-EXAMINER: Chung-Trans; Xuong

ATTY-AGENT-FIRM: Baker & Botts, L.L.P.

ABSTRACT:

A system and method for customer promotion. A terminal enters a customer's identification code, along with customer transaction data, at the point-of-sale. A memory stores a database of previously entered customer identification codes and transactions data. Circuitry is provided for generating a signal representative of a customer's shopping history, wherein incentive coupons may be issued to customers in dependence upon the signal.

23 Claims, 75 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KNIC	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-----------	-------

☐ 6. Document ID: US 5644723 A

L8: Entry 6 of 13

File: USPT

Jul 1, 1997

US-PAT-NO: 5644723

DOCUMENT-IDENTIFIER: US 5644723 A

TITLE: Method and system for selective incentive point-of-sale marketing in response to customer shopping histories

DATE-ISSUED: July 1, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Deaton; David W.	Abilene	TX	N/A	N/A
Gabriel; Rodney G.	Abilene	TX	N/A	N/A

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Credit Verification Corporation	Abilene	TX	N/A	N/A	02

APPL-NO: 8/ 178052

DATE FILED: January 4, 1994

PARENT-CASE:

RELATED APPLICATIONS This application is a continuation of U.S. application Ser. No. 08/096,921, filed Jul. 23, 1993, which is a continuation-in-part application of U.S. application Ser. No. 08/063,413, filed May 17, 1993, now U.S. Pat. No. 5,621,812 which is a continuation of U.S. application Ser. No. 07/886,383, filed May 19, 1992, allowed, but now abandoned, which is a continuation-in-part application of U.S. application Ser. No. 07/826,255, filed Jan. 24, 1992, now abandoned, which is a continuation of U.S. application Ser. No. 07/345,475, filed May 1, 1989, now abandoned.

INT-CL: [6] G06F 17/60

US-CL-ISSUED: 395/214

US-CL-CURRENT: 705/14

FIELD-OF-SEARCH: 235/375, 235/381, 235/383, 395/214, 395/221

REF-CITED:

U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>Re30579</u>	April 1981	Goldman et al.	N/A
<u>Re30580</u>	April 1981	Goldman et al.	N/A
<u>2995727</u>	May 1961	Quade	N/A
<u>3316536</u>	April 1967	Andrews	N/A
<u>3465289</u>	September 1969	Klein	N/A
<u>3528058</u>	September 1970	Bond	N/A
<u>3535682</u>	October 1970	Dykaar et al.	N/A
<u>3576539</u>	April 1971	Huber	N/A
<u>3605092</u>	September 1971	Richard	N/A
<u>3629829</u>	December 1971	Ordower	N/A
<u>3786421</u>	January 1974	Wostl	N/A
<u>3833885</u>	September 1974	Gentile et al.	N/A
<u>3876981</u>	April 1975	Welch	N/A
<u>3914789</u>	October 1975	Coker	N/A
<u>3941977</u>	March 1976	Voss et al.	N/A
<u>3987411</u>	October 1976	Krukltitis et al.	N/A
<u>4015701</u>	April 1977	Templeton	N/A
<u>4027142</u>	May 1977	Paup et al.	N/A
<u>4053735</u>	October 1977	Fondos	N/A
<u>4053737</u>	October 1977	Lafevers et al.	N/A
<u>4063070</u>	December 1977	Delarue et al.	N/A
<u>4087789</u>	May 1978	Beery	N/A
<u>4088879</u>	May 1978	Banka et al.	N/A
<u>4107653</u>	August 1978	Krukltitis	N/A
<u>4127770</u>	November 1978	Baader	N/A
<u>4143355</u>	March 1979	MacIntyre	N/A
<u>4143356</u>	March 1979	Nally	N/A
<u>4148010</u>	April 1979	Shiau	N/A
<u>4176783</u>	December 1979	Eppich	N/A
<u>4208575</u>	June 1980	Haltof	N/A
<u>4245211</u>	January 1981	Kao	N/A
<u>4260880</u>	April 1981	Thomas	N/A
<u>4277689</u>	July 1981	Thomas et al.	N/A
<u>4356472</u>	October 1982	Ku et al.	N/A
<u>4380734</u>	April 1983	Allerton	N/A
<u>4381494</u>	April 1983	Wisner	N/A
<u>4396902</u>	August 1983	Warthan et al.	N/A
<u>4399553</u>	April 1983	Toyama	N/A
<u>4404649</u>	September 1983	Nunley et al.	N/A
<u>4439670</u>	March 1984	Basset et al.	N/A
<u>4441204</u>	April 1984	Hanna	N/A
<u>4453074</u>	June 1984	Weinstein	N/A
<u>4510615</u>	April 1985	Rohrer	N/A
<u>4523330</u>	June 1985	Cain	N/A
<u>4547780</u>	October 1985	Cummins	N/A
<u>4547899</u>	October 1985	Nally et al.	N/A
<u>4554446</u>	November 1985	Murphy et al.	N/A
<u>4617457</u>	October 1986	Granzow	N/A
<u>4628194</u>	December 1986	Dobbins et al.	N/A

<u>4670853</u>	June 1987	Stepien	N/A
<u>4674041</u>	June 1987	Lemon et al.	N/A
<u>4678895</u>	July 1987	Tateisi et al.	N/A
<u>4703423</u>	October 1987	Bado et al.	N/A
<u>4722054</u>	January 1988	Yorozu et al.	N/A
<u>4723212</u>	February 1988	Mindrum	N/A
<u>4727243</u>	February 1988	Savar	235/379
<u>4748673</u>	May 1988	Barre et al.	N/A
<u>4750119</u>	June 1988	Cohen et al.	N/A
<u>4776021</u>	October 1988	Ho	N/A
<u>4791281</u>	December 1988	Johnsen et al.	N/A
<u>4797938</u>	January 1989	Will	N/A
<u>4809351</u>	February 1989	Abramovitz et al.	N/A
<u>4810866</u>	March 1989	Lord, Jr.	N/A
<u>4825045</u>	April 1989	Humble	N/A
<u>4833308</u>	May 1989	Humble	N/A
<u>4882675</u>	November 1989	Nichtberger et al.	N/A
<u>4885685</u>	December 1989	Wolfberg et al.	N/A
<u>4887207</u>	December 1989	Natarajan	N/A
<u>4897880</u>	January 1990	Wilber et al.	N/A
<u>4908761</u>	March 1990	Tai	N/A
<u>4910672</u>	March 1990	Off et al.	N/A
<u>4941090</u>	July 1990	McCarthy	N/A
<u>4949256</u>	August 1990	Humble	N/A
<u>4975841</u>	December 1990	Kehnemyi et al.	N/A
<u>4982346</u>	January 1991	Girourard et al.	364/550
<u>5008518</u>	April 1991	Taussig et al.	N/A
<u>5010485</u>	April 1991	Bigari	N/A
<u>5014324</u>	May 1991	Mazumder	N/A
<u>5025372</u>	June 1991	Burton et al.	364/406
<u>5053607</u>	October 1991	Carlson et al.	N/A
<u>5053955</u>	October 1991	Peach et al.	N/A
<u>5054092</u>	October 1991	LaCaze	N/A
<u>5056019</u>	October 1991	Schultz et al.	N/A
<u>5070452</u>	December 1991	Doyle et al.	N/A
<u>5091634</u>	February 1992	Finch	N/A
<u>5095195</u>	March 1992	Harman et al.	N/A
<u>5117355</u>	May 1992	McCarthy	364/405
<u>5128520</u>	July 1992	Rando et al.	N/A
<u>5173851</u>	December 1992	Off et al.	N/A
<u>5179375</u>	January 1993	Dick et al.	340/825
<u>5185695</u>	February 1993	Pruchnicki	N/A
<u>5201010</u>	April 1993	Deaton	382/7
<u>5202826</u>	April 1993	McCarthy	364/405
<u>5237496</u>	August 1993	Kagami	N/A
<u>5245164</u>	September 1993	Oyama	N/A
<u>5245533</u>	September 1993	Marshall	N/A
<u>5249044</u>	September 1993	Von Kohorn	N/A
<u>5251152</u>	October 1993	Notess	N/A
<u>5253345</u>	October 1993	Fernandes et al.	N/A

FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO
55-47560

PUBN-DATE
April 1980

COUNTRY
JPX

OTHER PUBLICATIONS

"A New Dimension in Marketing", Program Grocer, vol. 66 No. 5, The Magazine of Supermarking, May 1987.
Advertising Age, "S&H, Saffer reward frequent shoppers", Mar. 16, 1987.
Sun, "Checking Out the Customer", Washington Post, Jul. 9, 1989.
Diary Foods, "Frequent buyer programs get off the ground"; Nov. 1989, p. 64.
Article, Direct Marketing, v53, n9, Jan. 1991, Neal, Quaker's direct hit. (Quaker Oats Co.'s advertising subsidiary Quaker Direct), pp. 1-5.
PCT Written Opinion.
Holly Klokis, "Ukrop's Tests Data Base Marketing Program Electronic Couponing Tracks Buying Behavior of Valued Customers" Chain Store Age Executive, Sep. 1987.
Wall Street Journal 3 Star, Eastern, Aug. 7, 1986, "Grocery Stores Copy Airlines with Frequent--Buyer Bonuses", p. 21.
Washington Post, "Giant to Test Supermarket Cash Rebates" Jun. 14, 1989, pp. A1, A32.
Tanner, Ronald, A New Dimension in Marketing, Progressive Grocer, vol. 66, No. 5, May, 1987, pp. 133-136.
Hazelton, Lynette D., What's New in Supermarket Promotion -- Tracking Shoppers With Personal Bar Codes, New York Times, Business Section, Sunday, Jun. 18, 1989.
Freitag, Michael, In This Computer Age, Who Needs Coupons?, Front Page New York Times, Jun. 15, 1989.
"Front End Electronic Marketing Frequent Shopper & Other Programs" Food Marketing Institute, 1991, Carlene A. Thissen.
"Perspective on Electronic Marketing with Emphasis on Promotion Inside Supermarkets", Food Marketing Institute, 1990, Carlene A. Thissen.

ART-UNIT: 235

PRIMARY-EXAMINER: Harvey; Jack B.

ASSISTANT-EXAMINER: Chung-Trans; Xuong

ATTY-AGENT-FIRM: Baker & Botts, L.L.P.

ABSTRACT:

A system and method is disclosed for customer promotion. A terminal enters a customer's identification code, along with customer transaction data, at the point-of-sale. A memory stores a database of previously entered customer identification codes and transactions data. Circuitry is provided for generating a signal representative of a customer's shopping history, wherein incentive coupons may be issued to customers in dependence upon the signal.

27 Claims, 72 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWC	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	-----	-----------	-------

☐ 7. Document ID: US 5642485 A

L8: Entry 7 of 13

File: USPT

Jun 24, 1997

US-PAT-NO: 5642485

DOCUMENT-IDENTIFIER: US 5642485 A

TITLE: Method and system for selective incentive point-of-sale marketing in response to customer shopping histories

DATE-ISSUED: June 24, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Deaton; David W.	Abilene	TX	N/A	N/A
Gabriel; Rodney G.	Abilene	TX	N/A	N/A

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Credit Verification Corporation	Abilene	TX	N/A	N/A	02

APPL-NO: 8/ 458172

DATE FILED: June 1, 1995

PARENT-CASE:

RELATED APPLICATIONS This application is a continuation of U.S. application Ser. No. 08/178,052, filed Jan. 4, 1994 and entitled "Method and System for Selective Incentive Point-of-Sale Marketing in Response to Customer Shopping Histories", which is a continuation of U.S. application Ser. No. 08/096,921, filed Jul. 23, 1993, which is a continuation-in-part of U.S. application Ser. No. 08/063,413, filed May 17, 1993, pending, which is a continuation of U.S. application Ser. No. 07/886,383, filed May 19, 1992, abandoned, which is a continuation-in-part of U.S. application Ser. No. 07/826,255, filed Jan. 24, 1992, abandoned, which is a continuation of U.S. application Ser. No. 07/345,475, filed May 1, 1989, abandoned.

INT-CL: [6] G06F 17/60

US-CL-ISSUED: 395/214

US-CL-CURRENT: 705/14

FIELD-OF-SEARCH: 235/375, 235/381, 235/383, 395/214, 395/221

REF-CITED:

U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>3959624</u>	May 1976	Kaslow	235/61.11E
<u>4109238</u>	August 1978	Creekmore	340/149A
<u>4554446</u>	November 1985	Murphy et al.	235/487
<u>4670853</u>	June 1987	Stepien	364/70
<u>4674041</u>	June 1987	Lemon et al.	364/401
<u>4723212</u>	February 1988	Mindrum et al.	364/401
<u>4748668</u>	May 1988	Shamir et al.	380/30
<u>4750119</u>	June 1988	Cohen et al.	364/401
<u>4791281</u>	December 1988	Johnsen et al.	235/383
<u>4821186</u>	April 1989	Munakata et al.	364/405
<u>4882675</u>	November 1989	Nichtberger et al.	364/401
<u>4908761</u>	March 1990	Tai	364/401
<u>4910672</u>	March 1990	Off et al.	364/405
<u>4941090</u>	July 1990	McCarthy	364/405
<u>4949256</u>	August 1990	Humble	364/401
<u>4982346</u>	January 1991	Girouard et al.	364/550
<u>5010485</u>	April 1991	Bigari	364/408
<u>5053955</u>	October 1991	Peach et al.	364/401
<u>5056019</u>	October 1991	Schultz et al.	364/405
<u>5091634</u>	February 1992	Finch et al.	235/375
<u>5128520</u>	July 1992	Rando et al.	235/375
<u>5173851</u>	December 1992	Off et al.	364/401
<u>5179375</u>	January 1993	Dick et al.	340/825
<u>5185695</u>	February 1993	Pruchnicki	364/401
<u>5201010</u>	April 1993	Deaton et al.	382/7
<u>5245533</u>	September 1993	Marshall	364/401
<u>5249044</u>	September 1993	Von Kohorn	358/86

OTHER PUBLICATIONS

Article, Direct Marketing, v53, n9, Jan. 1991, Neal, Quaker's direct hit. (Quaker Oats Co.'s advertising subsidiary Quaker Direct), pp. 1-5.

PCT Written Opinion.

"Front End Electronic Marketing Frequent Shopper & Other Programs" Food Marketing Institute, 1991, Carlene A. Thissen.

"Perspectives on Electronic Marketing with Emphasis on Promotion Inside Supermarkets", Food Marketing Institute, 1990, Carlene A. Thissen.

"What's New in Supermarket Promotion", New York Times, Jun. 18, 1989, Lynette D. Hazelton.

"In this Computer Age, Who Needs Coupons", New York Times, Jun. 15, 1989, Michael Freitag.

Progressive Grocer, vol. 66, No. 5, May 1987, pp. 133-134, 136, Ronald Tanner.

Lena H. Sun, "Checking Out The Customer," The Washington Post, Sunday, Jul. 9, 1989.
"A New Dimension in Marketing", Progressive Grocer, vol. 66, No. 5, May 1987, pp. 133-136.
"UKROP's Test Data Base Marketing Program Electronic Couponing Tracks Buying Behavior of Valued Customers", Chain Store Age Executive, Sep., 198.
"Grocery Stores Copy Airlines w/ Frequent-Flyer Bonuses", Wall Street Journal & Star, Eastern, Aug. 7, 1986.
"S&H, Soffer Reward Frequent Shoppers", Advertising Age, Mar. 16, 1987, p. 22.
"Frequent Buyer Programs Get Off the Ground", Dairy Foods, Nov. 1989, p. 64.
"Giant to Test Supermarket Cash Rebates", Washington Post, Jun. 14, 1989, pp. A1, A32.

ART-UNIT: 235

PRIMARY-EXAMINER: Harvey; Jack B.

ASSISTANT-EXAMINER: Chung-Trans; Xuong

ATTY-AGENT-FIRM: Baker & Botts, L.L.P.

ABSTRACT:

A system and method is disclosed for customer promotion. A terminal enters a customer's identification code, along with customer transaction data, at the point-of-sale. A memory stores a database of previously entered customer identification codes and transactions data. Circuitry is provided for generating a signal representative of a customer's shopping history, wherein incentive coupons may be issued to customers in dependence upon the signal.

16 Claims, 72 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-----------	-------

☒ 8. Document ID: US 5596706 A

L8: Entry 8 of 13

File: USPT

Jan 21, 1997

US-PAT-NO: 5596706

DOCUMENT-IDENTIFIER: US 5596706 A

TITLE: Highly reliable online system

DATE-ISSUED: January 21, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Shimazaki; Hiroyuki	Tokyo	N/A	N/A	JPX
Mizoguchi; Masamichi	Yokohama	N/A	N/A	JPX
Yamasaki; Hajime	Kawasaki	N/A	N/A	JPX
Ogawa; Kazuaki	Osaka	N/A	N/A	JPX
Tanaka; Shinji	Tokyo	N/A	N/A	JPX
Yano; Tatsushi	Abiko	N/A	N/A	JPX
Shimizu; Takatoshi	Kawasaki	N/A	N/A	JPX
Kouguchi; Yukio	Tokyo	N/A	N/A	JPX
Yamashita; Tetsuo	Matsudo	N/A	N/A	JPX
Murabayashi; Satoshi	Yokohama	N/A	N/A	JPX
Suzuki; Nobuyuki	Yokohama	N/A	N/A	JPX
Watanabe; Yoshikuni	Yokohama	N/A	N/A	JPX
Nakagawa; Koichi	Yokohama	N/A	N/A	JPX
Fukagawa; Daisuke	Kashiwa	N/A	N/A	JPX
Ogino; Kouji	Ichihara	N/A	N/A	JPX

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Hitachi, Ltd.	Tokyo	N/A	N/A	JPX	03
The Sanwa Bank Limited	Tokyo	N/A	N/A	JPX	03

APPL-NO: 8/ 288584
DATE FILED: August 10, 1994

PARENT-CASE:

This application is a continuation of U.S. application Ser. No. 08/129,960, filed on Sep. 30, 1993, now U.S. Pat. No. 5,379,418, which was a continuation of U.S. application Ser. No. 07/660,633, filed on Feb. 25, 1991, now U.S. Pat. No. 5,307,481.

FOREIGN-APPL-PRIORITY-DATA:

COUNTRY	APPL-NO	APPL-DATE
JP	2-045433	February 28, 1990
JP	2-053695	March 7, 1990
JP	2-053696	March 7, 1990
JP	2-053697	March 7, 1990

INT-CL: [6] G06F 11/00

US-CL-ISSUED: 395/182.04; 395/182.06, 395/620

US-CL-CURRENT: 714/6; 707/204, 714/8

FIELD-OF-SEARCH: 395/575, 395/600, 395/625, 395/9.1

REF-CITED:

U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>5060185</u>	October 1991	Naito et al.	N/A
<u>5123099</u>	June 1992	Shibata et al.	N/A
<u>5202980</u>	April 1993	Morita et al.	395/575
<u>5271013</u>	December 1993	Gleeson	371/9.1

FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY
61-196347	August 1986	JPX

OTHER PUBLICATIONS

Nakagawa, et al., "Overview of New Banking System"--SANABAC III System of the Sanawa Bank, Ltd. Hitachi Hyoron, pub., vol. 70 No. 3, pp. 19-26.

ART-UNIT: 243

PRIMARY-EXAMINER: Canney; Vincent P.

ATTY-AGENT-FIRM: Fay, Sharpe, Beall, Fagan, Minnich & McKee

ABSTRACT:

A highly reliable online system is disclosed which is provided with a backup computer center (sub-online system) in addition with an original computer center (main online system) in order to improve the reliability of the online system. With respect to the database, the main online system is provided with an original database (main database) while the sub-online system is provided with a backup database (sub-database) which is a duplicate of the main database. The main online system and the sub-online system are connected through a transmission path. Information on an update performed in the main database is transferred to the sub-online system through the transmission path to thereby update the sub-database in a manner similar to the main database. Terminal units are normally connected to the main online system, wherein the main database is updated by transactions inputted from the terminals. When a failure occurs in the main online system, the terminals are changed over to be connected to the sub-online system to allow transaction processing to be continued. Further, there are provided a control system for synchronizing contents between the main database and the sub-database when the original computer center is changed over to the backup computer center, a recovery system for recovering the main database or the sub-database from failures and an integration system for integrating both the main database and the sub-database when they are independently updated due to a failure in the transmission path or the like.

10 Claims, 39 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-----------	-------

☐ 9. Document ID: US 5379418 A

L8: Entry 9 of 13

File: USPT

Jan 3, 1995

US-PAT-NO: 5379418

DOCUMENT-IDENTIFIER: US 5379418 A

TITLE: Highly reliable online system

DATE-ISSUED: January 3, 1995

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Shimazaki; Hiroyuki	Tokyo	N/A	N/A	JPX
Mizoguchi; Masamichi	Yokohama	N/A	N/A	JPX
Yamasaki; Hajime	Kawasaki	N/A	N/A	JPX
Ogawa; Kazuaki	Osaka	N/A	N/A	JPX
Tanaka; Shinji	Tokyo	N/A	N/A	JPX
Yano; Tatsushi	Abiko	N/A	N/A	JPX
Shimizu; Takatoshi	Kawasaki	N/A	N/A	JPX
Kouguchi; Yukio	Tokyo	N/A	N/A	JPX
Yamashita; Tetsuo	Matsudo	N/A	N/A	JPX
Murabayashi; Satoshi	Yokohama	N/A	N/A	JPX
Suzuki; Nobuyuki	Yokohama	N/A	N/A	JPX
Watanabe; Yoshikuni	Yokohama	N/A	N/A	JPX
Nakagawa; Koichi	Yokohama	N/A	N/A	JPX
Fukagawa; Daisuke	Kashiwa	N/A	N/A	JPX
Ogino; Kouji	Ichihara	N/A	N/A	JPX

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Hitachi, Ltd.	Tokyo	N/A	N/A	JPX	03
The Sanwa Bank Limited	Tokyo	N/A	N/A	JPX	03

APPL-NO: 8/ 129960

DATE FILED: September 30, 1993

PARENT-CASE:

This application is a continuation of U.S. application Ser. No. 07/660,633, filed on Feb. 25, 1991.

FOREIGN-APPL-PRIORITY-DATA:

COUNTRY	APPL-NO	APPL-DATE
JP	2-045443	February 28, 1990
JP	2-053695	March 7, 1990
JP	2-053696	March 7, 1990
JP	2-053697	March 7, 1990

INT-CL: [6] G06F 15/21

US-CL-ISSUED: 395/575; 371/9.1, 371/11.3

US-CL-CURRENT: 714/11; 714/20

FIELD-OF-SEARCH: 395/575, 371/9.1, 371/11.3

REF-CITED:

U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>5060185</u>	October 1991	Naito et al.	N/A
<u>5123099</u>	June 1992	Shibata et al.	N/A

OTHER PUBLICATIONS

Nakagawa, et al., "Overview of New Banking System-SANABAC III System of the Sanawa Bank, Ltd. Hitachi Hyoron", pub., vol. 70 No. 3, pp. 19-26.

ART-UNIT: 233

PRIMARY-EXAMINER: Canney; Vincent P.

ATTY-AGENT-FIRM: Fay, Sharpe, Beall, Fagan, Minnich & McKee

ABSTRACT:

A highly reliable online system is disclosed which is provided with a backup computer center (sub-online system) in addition with an original computer center (main online system) in order to improve the reliability of the online system. With respect to the database, the main online system is provided with an original database (main database) while the sub-online system is provided with a backup database (sub-database) which is a duplicate of the main database. The main online system and the sub-online system are connected through a transmission path. Information on an update performed in the main database is transferred to the sub-online system through the transmission path to thereby update the sub-database in a manner similar to the main database. Terminal units are normally connected to the main online system, wherein the main database is updated by transactions inputted from the terminals. When a failure occurs in the main online system, the terminals are changed over to be connected to the sub-online system to allow transaction processing to be continued. Further, there are provided a control system for synchronizing contents between the main database and the sub-database when the original computer center is changed over to the backup computer center, a recovery system for recovering the main database or the sub-database from failures and an integration system for integrating both the main database and the sub-database when they are independently updated due to a failure in the transmission path or the like.

7 Claims, 39 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-----------	-------

☐ 10. Document ID: US 5307481 A

L8: Entry 10 of 13

File: USPT

Apr 26, 1994

US-PAT-NO: 5307481

DOCUMENT-IDENTIFIER: US 5307481 A

TITLE: Highly reliable online system

DATE-ISSUED: April 26, 1994

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Shimazaki; Hiroyuki	Tokyo	N/A	N/A	JPX
Mizoguchi; Masamichi	Yokohama	N/A	N/A	JPX
Yamasaki; Hajime	Kawasaki	N/A	N/A	JPX
Ogawa; Kazuaki	Osaka	N/A	N/A	JPX
Tanaka; Shinji	Tokyo	N/A	N/A	JPX
Yano; Tatsushi	Abiko	N/A	N/A	JPX
Shimizu; Takatoshi	Kawasaki	N/A	N/A	JPX
Kouguchi; Yukio	Tokyo	N/A	N/A	JPX
Yamashita; Tetsuo	Matsudo	N/A	N/A	JPX
Murabayashi; Satoshi	Yokohama	N/A	N/A	JPX
Suzuki; Nobuyuki	Yokohama	N/A	N/A	JPX
Watanabe; Yoshikuni	Yokohama	N/A	N/A	JPX
Nakagawa; Koichi	Yokohama	N/A	N/A	JPX
Fukagawa; Daisuke	Kashiwa	N/A	N/A	JPX
Ogino; Kouji	Ichihara	N/A	N/A	JPX

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Hitachi, Ltd.	Tokyo	N/A	N/A	JPX	03
The Sanwa Bank Limited	Tokyo	N/A	N/A	JPX	03

APPL-NO: 7/ 660633

DATE FILED: February 25, 1991

FOREIGN-APPL-PRIORITY-DATA:

COUNTRY	APPL-NO	APPL-DATE
JP	2-045443	February 28, 1990
JP	2-053695	March 7, 1990
JP	2-053696	March 7, 1990
JP	2-053697	March 7, 1990

INT-CL: [5] G06F 15/21

US-CL-ISSUED: 395/575; 371/9.1, 371/11.3

US-CL-CURRENT: 714/11

FIELD-OF-SEARCH: 371/9.1, 371/10.1, 371/11.2, 371/11.3, 371/8.1, 371/8.2, 395/575

REF-CITED:

U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>5060185</u>	October 1991	Naito et al.	371/10.1
<u>5123099</u>	June 1992	Shibata et al.	371/10.1

FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY
61-196347	August 1986	JPX

OTHER PUBLICATIONS

Nakagawa, et al., "Overview of New Banking System-Sanabac III System of the Sanwa Bank, Ltd.", Hitachi Hyoron (Hitachi Review), Hitachi, Ltd., pub., vol. 70, No. 3, pp. 19-26.

ART-UNIT: 233

PRIMARY-EXAMINER: Canney; Vincent P.

ATTY-AGENT-FIRM: Fay, Sharpe, Beall, Fagan, Minnich & McKee

ABSTRACT:

A highly reliable online system is disclosed which is provided with a backup computer

center (sub-online syst in addition with an original computer center (main online system) in order to improve the reliability of the online system. With respect to the database, the main online system is provided with an original database (main database) while the sub-online system is provided with a backup database (sub-database) which is a duplicate of the main database. The main online system and the sub-online system are connected through a transmission path. Information on an update performed in the main database is transferred to the sub-online system through the transmission path to thereby update the sub-database in a manner similar to the main database. Terminal units are normally connected to the main online system, wherein the main database is updated by transactions inputted from the terminals. When a failure occurs in the main online system, the terminals are changed over to be connected to the sub-online system to allow transaction processing to be continued. Further, there are provided a control system for synchronizing contents between the main database and the sub-database when the original computer center is changed over to the backup computer center, a recovery system for recovering the main database or the sub-database from failures and an integration system for integrating both the main database and the sub-database when they are independently updated due to a failure in the transmission path or the like.

1 Claims, 39 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-----------	-------

☐ 11. Document ID: US 5274802 A

L8: Entry 11 of 13

File: USPT

Dec 28, 1993

US-PAT-NO: 5274802

DOCUMENT-IDENTIFIER: US 5274802 A

TITLE: Method for restoring lost databases by comparing existing database and generic database, and generating cellular switch commands to update the generic database

DATE-ISSUED: December 28, 1993

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Altine; Phillip	Spring	TX	N/A	N/A

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
GTE Mobilnet Incorporated	Atlanta	GA	N/A	N/A	02

APPL-NO: 7/ 659192

DATE FILED: February 22, 1991

INT-CL: [5] G06F 15/40

US-CL-ISSUED: 395/600; 379/59, 379/60, 364/222.3, 364/283.4, 364/974.4, 364/919.4, 364/DIG.1, 364/DIG.2, 455/33.1, 455/33.2, 371/8.1, 395/575

US-CL-CURRENT: 707/202; 455/560, 714/6

FIELD-OF-SEARCH: 364/DIG.1, 364/DIG.2, 395/600, 395/575, 379/59, 379/60, 371/7, 371/8.1, 455/33.1, 455/33.2

REF-CITED:

U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>4153931</u>	May 1979	Green et al.	395/600
<u>4479196</u>	October 1984	Ferrar et al.	395/600
<u>4646229</u>	February 1987	Boyle	395/600
<u>4887265</u>	December 1989	Felix	370/94.1
<u>4916691</u>	April 1990	Goodman	370/60
<u>4958368</u>	September 1990	Parker	379/91

OTHER PUBLICATIONS

"EMX Operator's Input Message Manual System Recent Change Commands", EMX vol. 3, Book 2, pp. 5-205, 5-207 i-74, Motorola Inc, 1987.

ART-UNIT: 237

PRIMARY-EXAMINER: Lee; Thomas C.

ASSISTANT-EXAMINER: Lintz; Paul

ABSTRACT:

An improved method is disclosed for automatically updating databases contained in the random access memory and tape storage of a cellular switch. First, instructions are issued to a cellular switch, causing the switch to provide a first output of one or more operative databases contained in the random access memory of the switch. Then, one or more backup databases are loaded into the random access memory of the switch, and instructions are issued to the switch causing the switch to provide a second output of the backup databases. The first and second outputs are then analyzed by a computer program, and in response to the analysis the program automatically assembles a number of cellular switch compatible software commands into a text file. Finally the text file is transmitted to the switch, thereby updating databases contained in the random access memory and the tape storage of the switch.

3 Claims, 8 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	RMC	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	-----	-----------	-------

☐ 12. Document ID: US 5201010 A

L8: Entry 12 of 13

File: USPT

Apr 6, 1993

US-PAT-NO: 5201010

DOCUMENT-IDENTIFIER: US 5201010 A

TITLE: Method and system for building a database and performing marketing based upon prior shopping history

DATE-ISSUED: April 6, 1993

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Deaton; David W.	Abilene	TX	N/A	N/A
Gabriel; Rodney G.	Abilene	TX	N/A	N/A

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Credit Verification Corporation	Abilene	TX	N/A	N/A	02

APPL-NO: 7/ 886385

DATE FILED: May 19, 1992

PARENT-CASE:

RELATED APPLICATIONS This application is a continuation-in-part of Ser. No. 07/826,255, filed Jan. 24, 1992, which is a continuation of Ser. No. 07/345,475, filed May 1, 1989, now abandoned.

INT-CL: [5] G06K 9/00

US-CL-ISSUED: 382/7; 382/1

US-CL-CURRENT: 382/139; 382/305

FIELD-OF-SEARCH: 235/375, 235/379, 235/380, 235/381, 235/383, 235/385, 235/487, 340/825.33, 340/825.34, 364/401, 364/408, 379/91, 902/4, 902/5, 902/6, 382/1, 382/7, 382/9, 382/48

REF-CITED:

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>Re30579</u>	April 1981	Goldman et al.	340/149R
<u>Re30580</u>	April 1981	Goldman et al.	340/149R
<u>2995727</u>	August 1961	Quade	N/A
<u>3316536</u>	April 1967	Andrews et al.	N/A
<u>3465289</u>	September 1969	Klein	N/A
<u>3528058</u>	September 1970	Bond	N/A
<u>3535682</u>	October 1970	Dykaar et al.	N/A
<u>3576539</u>	April 1971	Huber	340/152
<u>3605092</u>	September 1971	Richard	340/146.3C
<u>3629829</u>	December 1971	Ordower	340/146.3Q
<u>3786421</u>	January 1974	Wostl et al.	340/149A
<u>3833885</u>	September 1974	Gentile et al.	340/152R
<u>3876981</u>	April 1975	Welch	340/146.3D
<u>3914789</u>	October 1975	Coker et al.	360/2
<u>3941977</u>	March 1976	Voss et al.	235/61.7B
<u>3987411</u>	October 1976	Krukklitis et al.	340/146.3C
<u>4015701</u>	April 1977	Templeton	197/127R
<u>4027142</u>	May 1977	Paup et al.	235/61.9R
<u>4053735</u>	October 1977	Foudos	235/61.9R
<u>4053737</u>	October 1977	Lafevers et al.	235/61.11D
<u>4063070</u>	December 1977	DeLarue et al.	235/474
<u>4087789</u>	May 1978	Beery	340/146.3C
<u>4088879</u>	May 1978	Banka et al.	235/449
<u>4107653</u>	August 1978	Krukklitis	340/146.3C
<u>4109238</u>	August 1978	Creekmore	235/379
<u>4127770</u>	November 1978	Baader	235/474
<u>4143355</u>	March 1979	Macintire	340/146.3C
<u>4143356</u>	March 1979	Nally	340/146.3C
<u>4148010</u>	April 1979	Shiau	340/146.3C
<u>4176783</u>	December 1979	Eppich	235/474
<u>4208575</u>	June 1980	Haltof	235/380
<u>4245211</u>	January 1981	Kao	340/146.3C
<u>4260880</u>	April 1981	Thomas	235/454
<u>4277689</u>	July 1981	Thomas et al.	N/A
<u>4356472</u>	October 1982	Hau-Chun et al.	340/146.3C
<u>4380734</u>	April 1983	Allerton	324/225
<u>4381494</u>	April 1983	Wisner	382/64
<u>4396902</u>	August 1983	Warthan et al.	382/64
<u>4399553</u>	August 1983	Toyama	382/7
<u>4404649</u>	September 1983	Nunley et al.	364/900
<u>4439670</u>	March 1984	Basset et al.	235/382
<u>4441204</u>	April 1984	Hanna	382/7
<u>4453074</u>	June 1984	Weinstein	235/380
<u>4510615</u>	April 1985	Rohrer	382/7
<u>4523330</u>	June 1985	Cain	382/7
<u>4547780</u>	October 1985	Cummins	346/9
<u>4547899</u>	October 1985	Nalley et al.	382/7
<u>4617457</u>	October 1986	Granzow et al.	235/379
<u>4628194</u>	December 1986	Dobbins et al.	235/379
<u>4672377</u>	June 1987	Murphy et al.	235/375
<u>4673802</u>	June 1987	Ohmae et al.	235/380
<u>4678895</u>	July 1987	Tateisi et al.	235/379
<u>4723212</u>	February 1988	Mindrum et al.	364/401
<u>4748673</u>	May 1988	Barre et al.	382/7

<u>4776021</u>	October 19	Ho	382/7
<u>4797938</u>	January 1989	Will	382/7
<u>4809351</u>	February 1989	Abramovitz et al.	382/59
<u>4810866</u>	March 1989	Lord, Jr.	235/379
<u>4812628</u>	March 1989	Boston et al.	364/408
<u>4882675</u>	November 1989	Nichtberger et al.	364/401
<u>4891503</u>	January 1990	Jewell	364/408
<u>4897880</u>	January 1990	Wilber et al.	382/13
<u>4910672</u>	March 1990	Off et al.	364/405
<u>4949256</u>	August 1990	Humble	364/401
<u>4975841</u>	December 1990	Kehnemuyi et al.	364/401
<u>5010485</u>	April 1991	Bigari	364/408
<u>5014324</u>	May 1991	Mazumder	382/7
<u>5035607</u>	October 1991	Carlson et al.	235/379
<u>5053955</u>	October 1991	Peach et al.	364/401
<u>5054092</u>	October 1991	Lacaze	382/11
<u>5056019</u>	October 1991	Schultz et al.	364/405
<u>5070452</u>	December 1991	Doyle, Jr. et al.	364/401
<u>5091634</u>	February 1992	Finch et al.	235/375

ART-UNIT: 266

PRIMARY-EXAMINER: Couso; Jose L.

ATTY-AGENT-FIRM: Baker & Botts

ABSTRACT:

A method and system is disclosed for performing targeted marketing on infrequent shoppers. A check reader is provided for automatically reading the MICR code of a plurality of checks drawn on a plurality of different banking institutions. Circuitry detects the customer's checking account number in the MICR code of the checks. A terminal enters data relating to the customer's shopping habits. A database of the store's customers is created in response to the check reader, circuitry for detecting, and terminal. The selection is then made of a list of customers from the database who have not shopped at the store since a preselected date.

41 Claims, 41 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw. Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	------------	-------

☒ 13. Document ID: US 5170480 A

L8: Entry 13 of 13

File: USPT

Dec 8, 1992

US-PAT-NO: 5170480

DOCUMENT-IDENTIFIER: US 5170480 A

TITLE: Concurrently applying redo records to backup database in a log sequence using single queue server per queue at a time

DATE-ISSUED: December 8, 1992

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Mohan; Chandrasekaran	San Jose	CA	N/A	N/A
Obermarck; Ronald L.	Redwood City	CA	N/A	N/A
Treiber; Richard K.	San Jose	CA	N/A	N/A

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
International Business Machines Corporation	Armonk	NY	N/A	N/A	02

APPL-NO: 7/ 411729

DATE FILED: September 25, 1989

INT-CL: [5] G06F 15/40, G06F 15/417, G06F 12/00, G06F 12/16

US-CL-ISSUED: 395/600; 395/575, 395/250, 364/282.1, 364/285.3, 364/DIG.1, 371/8.1, 371/29.1, 371/16.5

US-CL-CURRENT: 707/201; 711/115, 714/16, 714/20

FIELD-OF-SEARCH: 364/200, 364/900, 395/800, 395/600, 395/575, 395/250, 395/650, 371/8.1, 371/29.1, 371/16.5

REF-CITED:

U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>4159517</u>	June 1979	Paradine et al.	364/200
<u>4435762</u>	March 1984	Milligan et al.	364/200
<u>4498145</u>	February 1985	Baker et al.	364/900
<u>4507751</u>	March 1985	Gawlick et al.	364/900
<u>4509119</u>	April 1985	Gumaer et al.	364/200
<u>4710870</u>	December 1987	Blackwell et al.	364/200
<u>4819159</u>	April 1989	Shipley et al.	364/200
<u>4868744</u>	September 1989	Remsch et al.	364/280
<u>4878167</u>	October 1989	Kapulka et al.	364/200
<u>4881163</u>	November 1989	Thomas et al.	395/250
<u>4881166</u>	November 1989	Thompson et al.	395/600
<u>4930072</u>	May 1990	Agrawal et al.	364/300
<u>4941087</u>	June 1990	Kap	364/200
<u>4949251</u>	August 1990	Griffin et al.	364/200
<u>4965719</u>	October 1990	Shoens et al.	395/650
<u>5001628</u>	March 1991	Johnson et al.	364/200
<u>5005122</u>	April 1991	Griffin et al.	364/200
<u>5043866</u>	August 1991	Myre, Jr. et al.	395/600
<u>5095421</u>	March 1992	Freund	395/650

OTHER PUBLICATIONS

U.S. Patent Application Ser. No. 07/059,666 filed Jun. 8, 1987 Inventors: Haderle, et al., Group Art 231 A Parallel Logging Algorithm for Multiprocessor Database Machines, by Rakesh Agrawal, AT&T Bell Laboratories pp. 256-276.

Recovery Architectures for Multiprocessor Database Machines, Rakesh Agrawal, et al., 1985 ACM, pp. 131-145.

Design Considerations in Replicated Database Systems for Disaster Protection, Jim Lyon, 1988 IEEE, pp. 428-430.

Global Recovery in a Distributed Data Base System, Bernd Walter, DDSS, 1982, pp. 68-81.

Consistency and Recovery Control for Replicated Files, Danco Davcev et al. AMC, 1985, pp. 87-96.

ART-UNIT: 232

PRIMARY-EXAMINER: Anderson; Lawrence E.

ASSISTANT-EXAMINER: Shah; Alpesh M.

ATTY-AGENT-FIRM: Baker, Maxham, Jester & Meador

ABSTRACT:

Change processing of a replica database is accomplished by separating redo records obtained from the transaction log of a primary database into respective queues. The redo records are separated such that all transaction records for a unit of transfer (page) of the primary database are placed on the same queue in log sequence. Each queue is linked exclusively to one of a plurality of parallel queue servers. Each queue server applies to the replica database the redo records in the queues which it exclusively serves. The replica database is thereby made consistent with the primary data by a lock-free updating

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw. Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	------------	-------

Generate Collection

Terms	Documents
l7 and recovery	13

Display

40

Documents, starting with Document:

13

Display Format:

FRO

Change Format

WEST[Help](#)[Logout](#)[Interrupt](#)[Main Menu](#)[Search Form](#)[Posting Counts](#)[Show S Numbers](#)[Edit S Numbers](#)[Preferences](#)**Search Results -**

Terms	Documents
17 and attribute same copy	3

Database:

US Patents Full-Text Database	▲
JPO Abstracts Database	
EPO Abstracts Database	
Derwent World Patents Index	
IBM Technical Disclosure Bulletins	▼

Refine Search:

	▲
	▼

[Clear](#)**Search History****Today's Date: 9/25/2000**

<u>DB Name</u>	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u>
USPT	17 and attribute same copy	3	L8
USPT	heterogeneous database	104	L7
USPT	15 and attribute same copy	1	L6
USPT	backup database	101	L5
USPT	12 and 13	1	L4
USPT	11 and different databases	43	L3
USPT	11 and attributes same copy	4	L2
USPT	heterogeneous databases or heterogenous databases	118	L1

WEST**Generate Collection****Search Results - Record(s) 1 through 4 of 4 returned.**☐ 1. Document ID: US 6016394 A

L2: Entry 1 of 4

File: USPT

Jan 18, 2000

US-PAT-NO: 6016394

DOCUMENT-IDENTIFIER: US 6016394 A

TITLE: Method and system for database application software creation requiring minimal programming

DATE-ISSUED: January 18, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Walker; Jeffrey L.	Ross	CA	N/A	N/A

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
TenFold Corporation	Draper	UT	N/A	N/A	02

APPL-NO: 8/ 932255

DATE FILED: September 17, 1997

INT-CL: [6] G06F 9/445

US-CL-ISSUED: 395/701

US-CL-CURRENT: 717/1

FIELD-OF-SEARCH: 395/701, 707/103, 364/282.1, 345/356, 345/334

REF-CITED:

U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>4528644</u>	July 1985	Soderberg	705/410
<u>4827404</u>	May 1989	Barstow et al.	364/200
<u>4831526</u>	May 1989	Luchs et al.	364/401
<u>4949253</u>	August 1990	Chigira et al.	364/200
<u>5038296</u>	August 1991	Sano	364/513
<u>5353401</u>	October 1994	Iizawa et al.	345/335
<u>5381534</u>	January 1995	Shi	395/200
<u>5381548</u>	January 1995	Matsuo	395/700
<u>5423041</u>	June 1995	Burke et al.	395/700
<u>5437027</u>	July 1995	Bannon et al.	707/103
<u>5485601</u>	January 1996	Ching	395/500
<u>5485610</u>	January 1996	Gioielli et al.	395/600
<u>5495567</u>	February 1996	Iizawa et al.	345/334
<u>5504885</u>	April 1996	Alashqur	395/600
<u>5566330</u>	October 1996	Sheffield	707/4
<u>5586314</u>	December 1996	Hill et al.	395/604
<u>5615379</u>	March 1997	Wehle	395/701
<u>5819090</u>	October 1998	Wolf et al.	709/302
<u>5819251</u>	October 1998	Kremer et al.	707/1
<u>5830065</u>	November 1998	Sitrick	463/31

OTHER PUBLICATIONS

Title: Surfing the Web gets new smarts--Neural-learning and fuzzy-logic tools add intelligence to Internet advertising, Author: Johnson, Colin R, source: Electronic Engineering Times, dated: Jan. 5th, 1998.
Efficient and Language-Independent Mobile Program, Author: Adl-Tabatabai, ACM, May 1996.

ART-UNIT: 272

PRIMARY-EXAMINER: Hafiz; Tariq R.

ASSISTANT-EXAMINER: Das; Chameli Chaudhuri

ATTY-AGENT-FIRM: Kirton & McConkie Krieger; Michael F.

ABSTRACT:

A system and method for computer-assisted database management software creation of a target software application from a description known as a dictionary interoperating with a universal software application. The dictionary contents customize the universal application into the target software application created from a high-level dialog between an application designer and a graphical application editor. The application editor provides an environment for editing and creating custom applications and automatically creates security partitioning of responsibilities and users, hierarchical menu structures, groupings of database data elements into efficient sets, database transactions and database partitioning without requiring programming in SQL language by an application designer. The computer stores the dictionary in a database for accessing by the universal application. The dictionary customizes the re-usable universal application for interaction with relational databases such as Oracle.RTM., IBM.RTM. DB2, and Sybase.RTM..

27 Claims, 11 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMD	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	-----	-----------	-------

☐ 2. Document ID: US 6009422 A

L2: Entry 2 of 4

File: USPT

Dec 28, 1999

US-PAT-NO: 6009422

DOCUMENT-IDENTIFIER: US 6009422 A

TITLE: System and method for query translation/semantic translation using generalized

query language

DATE-ISSUED: December 28, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Ciccarelli; Steven Matthew	Ashburn	VA	N/A	N/A

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
International Business Machines Corporation	Armonk	NY	N/A	N/A	02

APPL-NO: 8/ 980156

DATE FILED: November 26, 1997

INT-CL: [6] G06F 17/30

US-CL-ISSUED: 707/4; 707/10

US-CL-CURRENT: 707/4; 707/10

FIELD-OF-SEARCH: 707/4, 707/10, 707/102, 395/200.3, 395/200.31, 395/200.32, 395/200.33, 395/200.47, 395/200.48, 395/200.49

REF-CITED:

U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>5408652</u>	April 1995	Hayashi et al.	707/1
<u>5416917</u>	May 1995	Adair et al.	395/500
<u>5590319</u>	December 1996	Cohen et al.	707/4
<u>5596744</u>	January 1997	Dao et al.	395/610
<u>5634053</u>	May 1997	Nobel et al.	395/604
<u>5655116</u>	August 1997	Kirk et al.	707/1

OTHER PUBLICATIONS

Ballesteros et al., "Phrasal Translation and Query Expansion Techniques for Cross-Language Information Retrieval", SIGIR 97, ACM, 1997.

ART-UNIT: 271

PRIMARY-EXAMINER: Black; Thomas G.

ASSISTANT-EXAMINER: Loomis; John C.

ATTY-AGENT-FIRM: Redmond, Jr.; Joseph C. Meyers; Steven J. Morgan & Finnegan, LLP

ABSTRACT:

An information retrieval system and method translates a single search request or query across heterogenous databases independent of the database search grammar(s). A client uses a process to express the query in a powerful programming language, i.e., Generalized Query Language (GQL) which has a wide variety of operators to precisely specify the conditions of the query and enable a fused response to be provided by the databases to the query. The process translates the query into phrases contained in a GQL and constructs a complex search query which bridges the gap between the query and the low level of functionality provided in search engines associated with the databases. A search broker receives the GQL query and using a process (i) checks for syntax errors; (2), if correct, parses the complex query into individual search or partial queries and associated logical operations, and (3) forwards the partial queries and operations to the database search engines. Each search engines translates the partial queries into database search grammar for searching purposes and retrieves search information in the form of a "HitList" related to the query. Each search engines combines the "HitList" in accordance with the operations associated with the partial queries and any constraints specified in the query to generate a search result having a format common in appearance with other search engine results which serves as a fused response from the heterogenous databases.

20 Claims, 6 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	Know	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-----------	-------

☐ 3. Document ID: US 5724575 A

L2: Entry 3 of 4

File: USPT

Mar 3, 1998

US-PAT-NO: 5724575

DOCUMENT-IDENTIFIER: US 5724575 A

TITLE: Method and system for object-based relational distributed databases

DATE-ISSUED: March 3, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Hoover; Michael K.	Roswell	GA	N/A	N/A
Miller; Barrick H.	Marietta	GA	N/A	N/A
Schurenberg; Kurt	Roswell	GA	N/A	N/A
Daigle; Richard A.	Atlanta	GA	N/A	N/A

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
ActaMed Corp.	Atlanta	GA	N/A	N/A	02

APPL-NO: 8/ 674024

DATE FILED: July 1, 1996

PARENT-CASE:

This is a continuation of application Ser. No. 08/202,493, filed Feb. 25, 1994, now U.S. Pat. No. 5,560,005.

INT-CL: [6] G06F 17/30, G06F 15/163

US-CL-ISSUED: 395/610; 395/614, 395/200.09

US-CL-CURRENT: 707/10; 707/103, 709/205, 709/217

FIELD-OF-SEARCH: 395/610, 395/614, 395/615, 395/200.03, 395/200.09

REF-CITED:

U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>5093911</u>	March 1992	Parks et al.	395/615
<u>5136716</u>	August 1992	Harvey et al.	364/DIG.1
<u>5317742</u>	May 1994	Bapat	395/680
<u>5408619</u>	April 1995	Oran	395/610
<u>5426747</u>	June 1995	Weinreb et al.	395/413

OTHER PUBLICATIONS

P. Sinha et al., "The Architectural Overview of the Galaxy Distributed Operating System" (published in T. Casavant et al., Readings in Distributed Computing Systems (IEEE Comp. Soc. Press 1994)).

M. Ozsu et al., "Distributed Data Management: Unsolved Problems and New Issues" (published in T. Casavant et al., Readings in Distributed Computing Systems (IEEE Comp. Soc. Press 1994)).

X. Jia et al., "Highly Concurrent Directory Management in the Galaxy Distributed System", Proc. 10th Int'l Conf. Distributed Computing Systems, IEEE Computer Society Press, 1990, pp. 416-423.

D. Cheriton et al., "Decentralizing a Global Naming Service for Improved Performance and Fault Tolerance", ACM Trans. Computer Systems, vol. 7, No. 2, May 1989, pp. 147-183.

J. Joseph et al., "Object-Oriented Database: Design and Implementation", Proceedings of the IEEE, vol. 79, No. 1, Jan. 1991, pp. 42-64.

B. Liskov et al., "Programming Methodology Group Memo 77: Distributed Object Management

in Thor", Jun. 1993.

M. Day et al., "Programming Methodology Group Memo 79: References to Remote Mobile Objects in Thor", Dec. 1993.

F. Brazier et al., "Distributed Open Systems", Table of Contents only (IEEE Computer Society Press 1994).

A. Hurson et al., "Multidatabase Systems: An Advanced Solution for Global Information Sharing", Table of Contents only (IEEE Computer Society Press 1994).

A. Ananda et al., "Distributed Computing Systems: Concepts and Structures", Table of Contents only (IEEE Computer Society Press 1991).

E. Nahouraii et al., "Object-Oriented Databases", Table of Contents only (IEEE Computer Society Press 1991).

T. Casavant et al., "Readings in Distributed Computing Systems", Table of Contents only (IEEE Computer Society Press 1994).

Videotape, Barbara Liskov, "Thor: An Object-Oriented Database System," The Distinguished Lecture Series VII (Nov. 29, 1993).

ART-UNIT: 236

PRIMARY-EXAMINER: Heckler; Thomas M.

ATTY-AGENT-FIRM: Jones & Askew, LLP

ABSTRACT:

An object-based relational distributed database system and associated methods of operation that transforms data stored in a plurality of remote, heterogeneous user databases into a homogeneous data model is disclosed. Data stored in distributed, heterogeneous user database structures is homogenized by mapping into object attributes of predetermined instances of objects forming to a conceptual model that relates the various heterogeneous databases. The object attributes are stored in remote databases at client sites, which can be separate computer systems from the heterogeneous user databases or separate processes running on a computer system that maintains the heterogeneous user databases. The system stores location information and status information relating to the homogenized data in a centralized object broker for object management, thereby facilitating location and retrieval of data items from one or more of the remote, heterogeneous user databases.

118 Claims, 32 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-----------	-------

☐ 4. Document ID: US 5560005 A

L2: Entry 4 of 4

File: USPT

Sep 24, 1996

US-PAT-NO: 5560005

DOCUMENT-IDENTIFIER: US 5560005 A

TITLE: Methods and systems for object-based relational distributed databases

DATE-ISSUED: September 24, 1996

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Hoover; Michael K.	Roswell	GA	N/A	N/A
Miller; Barrick H.	Marietta	GA	N/A	N/A
Schurenberg; Kurt	Roswell	GA	N/A	N/A
Daigle; Richard A.	Atlanta	GA	N/A	N/A

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
ActaMed Corp.	Atlanta	GA	N/A	N/A	02

APPL-NO: 8/ 202493

DATE FILED: February 25, 1994

INT-CL: [6] G06F 17/30, G06F 15/163

US-CL-ISSUED: 395/600; 364/DIG.1, 364/283.4, 364/228, 364/275, 364/284.4

US-CL-CURRENT: 707/10

FIELD-OF-SEARCH: 395/200.03, 395/200.09, 395/200.1, 395/600, 395/700

REF-CITED:

U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>5093911</u>	March 1992	Parks et al.	395/600
<u>5136716</u>	August 1992	Harvey et al.	364/DIG.1
<u>5317742</u>	May 1994	Bapat	395/700
<u>5408619</u>	April 1995	Oran	364/DIG.1
<u>5426747</u>	June 1995	Weinreb et al.	395/600 X

OTHER PUBLICATIONS

J. Joseph et al., "Object-Oriented Databases: Design and Implementation", Proceedings of the IEEE, vol. 79, No. 1, Jan. 1991, pp. 42-64.

B. Liskov et al., "Programming Methodology Group Memo 77: Distributed Object Management in Thor", Jun. 1993.

M. Day et al., "Programming Methodology Group Memo 79: References to Remote Mobile Objects in Thor", Dec. 1993.

F. Brazier et al., "Distributed Open Systems", Table of Contents only (IEEE Computer Society Press 1994).

A. Hurson et al., "Multidatabase Systems: An Advanced Solution for Global Information Sharing", Table of Contents only (IEEE Computer Society Press 1994).

A. Ananda et al., "Distributed Computing Systems: Concepts and Structures", Table of Contents only (IEEE Computer Society Press 1991).

E. Nahouraii et al., "Object-Oriented Databases", Table of Contents only (IEEE Computer Society Press 1991).

T. Casavant et al., "Readings in Distributed Computing Systems", Table of Contents only (IEEE Computer Society Press 1994).

P. Sinha et al., "The Architectural Overview of the Galaxy Distributed Operating System" (published in T. Casavant et al., Readings in Distributed Computing Systems (IEEE Comp. Soc. Press 1994)).

M. Ozsu et al., "Distributed Data Management: Unsolved Problems and New Issues" (published in T. Casavant et al., Readings in Distributed Computing Systems (IEEE Comp. Soc. Press 1994)).

X. Jia et al., "Highly Concurrent Directory Management in the Galaxy Distributed System", Proc. 10th Int'l Conf. Distributed Computing Systems, IEEE Computer Society Press, 1990, pp. 416-423.

D. Cheriton et al., "Decentralizing a Global Naming Service for Improved Performance and Fault Tolerance", ACM Trans. Computer Systems, vol. 7, No. 2, May 1989, pp. 147-183.

Videotape, Barbara Liskov, "Thor: An Object-Oriented Database System", The Distinguished Lecture Series VII (Nov. 29, 1993).

ART-UNIT: 236

PRIMARY-EXAMINER: Heckler; Thomas M.

ATTY-AGENT-FIRM: Jones & Askew

ABSTRACT:

An object-based relational distributed database system and associated methods of operation that transforms data stored in a plurality of remote, heterogeneous user databases into a homogeneous data model is disclosed. Data stored in distributed, heterogeneous user database structures is homogenized by mapping into object attributes of predetermined instances of objects forming to a conceptual model that relates the various heterogeneous databases. The object attributes are stored in remote databases at client sites, which can be separate computer systems from the heterogeneous user databases or separate processes running on a computer system that maintains the heterogeneous user databases. The system stores location information and status information relating to the homogenized data in a centralized object broker for object management, thereby facilitating location and retrieval of data items from one or more of the remote, heterogeneous user databases.

85 Claims, 32 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-----------	-------

Generate Collection

Terms	Documents
l1 and attributes same copy	4

Display

40

Documents, starting with Document:

4

Display Format:

FRO

Change Format

Status: Path 1 of [Dialog Information Services via Modem]

Status: Initializing TCP/IP using (UseTelnetProto 1 ServiceID pto-dialog)
Trying 3106900061...Open

DIALOG INFORMATION SERVICES

PLEASE LOGON:

***** HHHHHHHH SSSSSSSS?

Status: Signing onto Dialog

ENTER PASSWORD:

***** HHHHHHHH SSSSSSSS? *****

Welcome to DIALOG

Status: Connected

Dialog level 00.07.20D

Last logoff: 25sep00 08:03:41

Logon file001 25sep00 13:17:46

File 1:ERIC 1966-2000/Sep 14
(c) format only 2000 The Dialog Corporation

Set	Items	Description
---	-----	-----

?begin 411

25sep00 13:18:10	User219455	Session D652.1
\$0.21	0.060	DialUnits File1
\$0.21		Estimated cost File1
\$0.02		TYMNET
\$0.23		Estimated cost this search
\$0.23		Estimated total session cost 0.060 DialUnits

File 411:DIALINDEX(R)

DIALINDEX(R)

(c) 2000 The Dialog Corporation plc

*** DIALINDEX search results display in an abbreviated ***

*** format unless you enter the SET DETAIL ON command. ***

?sf patents,compsci,eecomp

>>> 351 is unauthorized

>>> 352 is unauthorized

>>> 353 is unauthorized

>>>3 of the specified files are not available

You have 37 files in your file list.

(To see banners, use SHOW FILES command)

?show files

File	Name
----	-----

123:	CLAIMS(R)/Current Legal Status_1980-2000/Sep 12
------	---

340:	CLAIMS(R)/US Patent_1950-00/Sep 19
------	------------------------------------

342:	Derwent Patents Citation Indx_1978-00/200045
------	--

344:	Chinese Patents ABS_Apr 1985-2000/Aug
------	---------------------------------------

345: Inpadoc/Fam. & Legal Stat_1968-2000/UD=200037
 347: JAPIO_Oct_1976-2000/May(UPDATED 000915)
 348: European Patents_1978-2000/Sep W04
 349: PCT Fulltext_1983-2000/UB=20000921, UT=20000908
 371: French Patents_1961-2000/BOPI 0037
 447: IMSWorld Patents International_2000/Sep
 652: US Patents Fulltext_1971-1979
 653: US Pat.Fulltext_1980-1989
 654: US Pat.Full._1990-2000/Sep 19
 670: LitAlert_1973-2000/UD=200038
 2: INSPEC_1969-2000/Sep W4
 6: NTIS_1964-2000/Oct W3
 8: Ei Compendex(R)_1970-2000/Aug W4
 34: SciSearch(R) Cited Ref Sci_1990-2000/Sep W3
 35: Dissertation Abstracts Online_1861-2000/Jul
 65: Inside Conferences_1993-2000/Sep W4
 77: Conference Papers Index_1973-2000/Jul
 92: IHS Intl.Stds. & Specs._1999/Nov
 94: JICST-EPlus_1985-2000/May W3
 99: Wilson Appl. Sci & Tech Abs_1983-2000/Aug
 103: Energy SciTec_1974-2000/Aug B1
 108: Aerospace Database_1962-2000/Sep
 144: Pascal_1973-2000/Sep W3
 202: Information Science Abs._1966-2000/Iss 5
 233: Internet & Personal Comp. Abs._1981-2000/Sep
 238: Abs. in New Tech & Eng._1981-2000/Sep
 239: Mathsci_1940-2000/Nov
 275: Gale Group Computer DB(TM)_1983-2000/Sep 25
 434: SciSearch(R) Cited Ref Sci_1974-1989/Dec
 647: CMP Computer Fulltext_1988-2000/Sep W1
 674: Computer News Fulltext_1989-2000/Sep W1
 696: DIALOG Telecom. Newsletters_1995-2000/Sep 22
 241: Elec. Power DB_1972-1999Jan

?s (heterogeneous or heterogenous or different) (4n) (database? or data(w)base?)
 and copy?(3n)attribute?

Your SELECT statement is:

s (heterogeneous or heterogenous or different) (4n) (database? or
 data(w)base?) and copy?(3n)attribute?

Items	File
-----	----
1	348: European Patents_1978-2000/Sep W04
15	349: PCT Fulltext_1983-2000/UB=20000921, UT=20000908
3	653: US Pat.Fulltext_1980-1989

Processing

Processing

23	654: US Pat.Full._1990-2000/Sep 19
3	275: Gale Group Computer DB(TM)_1983-2000/Sep 25
1	647: CMP Computer Fulltext_1988-2000/Sep W1

6 files have one or more items; file list includes 37 files.

?begin 349,653,654

25sep00 13:24:49 User219455 Session D652.2
 \$6.38 5.103 DialUnits File411

\$6.38 Estimated cost File411
 \$0.35 TYMNET
 \$6.73 Estimated cost this search
 \$6.96 Estimated total session cost 5.164 DialUnits

SYSTEM:OS - DIALOG OneSearch

File 349:PCT Fulltext 1983-2000/UB=20000921, UT=20000908

(c) 2000 WIPO/MicroPat

*File 349: Phase 2 enhancements with current WIPO biblio data now online.
 See HELP NEWS 349 for more information.

File 653:US Pat.Fulltext 1980-1989

(c) format only 2000 The Dialog Corp.

*File 653: Reassignment data current through 12/06/1999 recordings.
 Due to recent processing problems, the SORT command is not working.

File 654:US Pat.Full. 1990-2000/Sep 19

(c) format only 2000 The Dialog Corp.

*File 654: Reassignment data current through 12/06/1999 recordings.
 Due to recent processing problems, the SORT command is not working.

Set Items Description

--- -----

?s (heterogeneous or heterogenous or different) (4n) (database? or data(w)base?)
 and copy?(3n)attribute?

Processing

Processing

33312	HETEROGENEOUS
5692	HETEROGENOUS
1389820	DIFFERENT
55074	DATABASE?
667995	DATA
1421226	BASE?
33742	DATA(W)BASE?
3459	((HETEROGENEOUS OR HETEROGENOUS) OR DIFFERENT) (4N) (DATABASE? OR DATA(W)BASE?)
130170	COPY?
103187	ATTRIBUTE?
313	COPY?(3N)ATTRIBUTE?
S1 41	(HETEROGENEOUS OR HETEROGENOUS OR DIFFERENT) (4N) (DATABASE? OR DATA(W)BASE?) AND COPY?(3N)ATTRIBUTE?

?t 1/2,ab,kwic/1-41

1/2,AB,KWIC/1 (Item 1 from file: 349)

DIALOG(R)File 349:PCT Fulltext

(c) 2000 WIPO/MicroPat. All rts. reserv.

00697171

METHODS AND APPARATUS FOR THE DISTRIBUTION OF DATA CONSTRUCTS, SUCH AS
 OBJECT-ORIENTED OBJECTS, AMONG PROCESSES

PROCEDES ET APPAREIL PERMETTANT DE DISTRIBUER DES STRUCTURES DE DONNEES,
 TELLES QUE DES OBJETS ORIENTES OBJETS, DANS DES TRAITEMENTS

Patent Applicant/Assignee:

MARCAM SOLUTIONS INC, MARCAM SOLUTIONS, INC. , 95 Wells Avenue, Newton,
 MA 02159 , US

Inventor(s):

GAGE John, GAGE, John , 15 Lake Street, Norfolk, MA 02056 , US

Patent and Priority Information (Country, Number, Date):

Patent: WO 0010096 A1 20000224 (WO 200010096)
Application: WO 99US17940 19990810 (PCT/WO US9917940)
Priority Application: US 9896515 19980814; US 99371323 19990810
Designated States: CA JP AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT
SE
Main International Patent Class: G06F-015/16;
International Patent Class: G06F-015/163; G06F-013/14; G06F-017/30;
Publication Language: English
Filing Language: English
Fulltext Word Count: 4528

English Abstract

A method of distributing a data constructs, such as an object- oriented programming "object", includes transmitting to the processes (12-16) a message that identifies the selected data construct and that identifies its type. That type can constitute the name of a data construct manager, or object manager (30), that can be executed within each process (1, 2, 3) to create, destroy or access and update (68, 70) a local copy of a corresponding data construct. The method further includes responding, e.g., within each of the processes (12-16), to the message by invoking a data construct manager (30) that corresponds to the "type" identifier in the message. The data construct manager (30) is used to access a data construct that is associated with (e.g., local to) the respective process and that corresponds to the data construct identified in the message.

French Abstract

L'invention concerne un procede de distribution de structures de donnees, telles qu'un objet de programmation oriente objet, consistant a emettre un message, qui identifie la structure de donnees selectionnee et son type. Ce type peut constituer le nom d'un gestionnaire de structure de donnees, ou un gestionnaire objet (30) pouvant etre execute dans chacun des traitements (1, 2, 3), afin de creer, detruire, acceder ou mettre a jour (68, (70) une copie locale d'une structure de donnees correspondante. Le procede consiste egalement a repondre, par exemple dans chaque traitement (12, 16), au message en demandant un gestionnaire de structure de donnees (30) correspondant a l'identificateur de type dans ledit message. Le gestionnaire de structure de donnees (30) permet d'accéder a une structure de donnees qui est associee (locale) au traitement respectif et qui correspond aux structures de donnees identifiees dans le message.

Fulltext Availability:
Detailed Description

Detailed Description

... office, as well. Thus, the Indian manufacturing site of a multinational corporation may utilize a different release of a database management package than the Taiwanese site.

One solution to this problem is provided in United...attribute by the other processes). If the user application also changes the value of the attribute COST in the copy of object ENGINE associated with process 12,

1/2,AB,KWIC/2 (Item 2 from file: 349)
DIALOG(R) File 349:PCT Fulltext

(c) 2000 WIPO/MicroPat. All rts. reserv.

00693934

OBJECT TO RELATIONAL DATABASE MAPPING INFRASTRUCTURE IN A CUSTOMER CARE AND BILLING SYSTEM

INFRASTRUCTURE POUR MISE EN CORRESPONDANCE D'OBJETS AVEC UNE BASE DE DONNEES RELATIONNELLE DANS UN SYSTEME DE SOINS ET DE FACTURATION CLIENTS

Patent Applicant/Assignee:

AMERICAN MANAGEMENT SYSTEMS INCORPORATED, AMERICAN MANAGEMENT SYSTEMS, INCORPORATED, 4050 Legato Road, Fairfax, VA 22033, US

Inventor(s):

ATKINS Stephan, ATKINS, Stephan, Apartment 206, Baumweg 39, D-60316 Frankfurt, DE

HOHMANN Andreas, HOHMANN, Andreas, Elfgenweg 14, D-40547 Dusseldorf, DE

BALDWIN James, BALDWIN, James, Kurfurstenstrasse 9, 4.OG, D-40211 Dusseldorf, DE

SCHMELZ Frank, SCHMELZ, Frank, Feuerbachstrasse 30, D-40223 Dusseldorf, DE

Patent and Priority Information (Country, Number, Date):

Patent: WO 0007120 A1 20000210 (WO 200007120)

Application: WO 99US16765 19990726 (PCT/WO US9916765)

Priority Application: US 9894459 19980729

Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES

FI GB GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV

MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG

US UZ VN YU ZW GH GM KE LS MW SD SL SZ UG ZW AM AZ BY KG KZ MD RU TJ TM

AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM

GA GN GW ML MR NE SN TD TG

Main International Patent Class: G06F-017/30;

Publication Language: English

Filing Language: English

Fulltext Word Count: 6930

English Abstract

A system that uses an object to relational database mapping infrastructure to map C++ objects and their relationships to and from a relational database. The mapping is facilitated by mapping files which describe an object and how the object corresponds to a table in the database. Overflow tables are provided in the database when an object is associated with more than a predetermined number of other objects, such as two. A C++ reflection layer allows access to attributes and methods of C++ objects at run-time by name. Mapped data is also memory buffered during the transferring of data to and from the database.

French Abstract

La presente invention concerne un systeme utilisant une infrastructure de mise en correspondance de base de donnees relationnelle pour etablir des correspondances entre des objets C++ et les relations que ceux-ci ont avec une base de donnees relationnelle. La mise en correspondance est facilitee par des fichiers de correspondances qui decrivent un objet et la facon dont ces objets correspondent avec une table de la base de donnees. La base de donnees comporte des tables de debordement des qu'un objet est associe a plus d'un nombre determine d'autres objets, deux par exemple. Une couche de reflexion C++ permet d'acceder par le nom a des attributs et a des methodes concernant les objets C++ pendant l'execution. Les donnees mises en correspondance peuvent etre egalement geres par memoire tampon pendant le transfert de donnees avec la base de

donnees.

Fulltext Availability:
Detailed Description

Detailed Description

... used to indicate whether the pointer is NULL. If the related object can be of different classes, an additional database column containing the class identifier is used. This provides ORDMI with the ability to handle...of the Primitive Node object extracting the attribute from the object and the field object copying the attribute to the buffer area. The buffer is then written to the database if it is...

1/2,AB,KWIC/3 (Item 3 from file: 349)
DIALOG(R)File 349:PCT Fulltext
(c) 2000 WIPO/MicroPat. All rts. reserv.

00691549

DYNAMIC ORGANIZATION MODEL AND MANAGEMENT COMPUTING SYSTEM AND METHOD THEREFOR

MODELE DYNAMIQUE D'ORGANISATION ET SYSTEME DE PRISE EN COMPTE INTEGREE; METHODE D'UTILISATION

Patent Applicant/Assignee:

CHENG Edward, CHENG, Edward , Oct Research Lab., Objectsoft Co., Suite 215, Three Waters Park , US

Inventor(s):

CHENG Edward, CHENG, Edward , Oct Research Lab., Objectsoft Co., Suite 215, Three Waters Park , US

Patent and Priority Information (Country, Number, Date):

Patent: WO 0004468 A1 20000127 (WO 200004468)

Application: WO 99US16090 19990716 (PCT/WO US9916090)

Priority Application: US 98116521 19980716

Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW GH GM KE LS MW SD SL SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

Main International Patent Class: G06F-017/30;

Publication Language: English

Filing Language: English

Fulltext Word Count: 11085

English Abstract

The present invention provides a dynamic organizational database as an underlying information system to support collaborative computing in a global enterprise (58). This information system is built based on the Organizational Modeling and Management model (OMM) (90) and provides a system architecture (Fig. 8) and a graphical user interface (Fig. 10) for easy manipulation of organizational objects (70). Contrary to traditional approaches (38), the present invention separates the organization model (42) from the process model (44), the application model (36) and the data model (32). Thus, independent and flexible enterprise modeling and design is allowed to reflect more realistically a rapidly changing business environment.

French Abstract

La presente invention concerne un base de donnees organisationnelle dynamique sous forme de systeme informatique sous- jacent pour la gestion comptable integree dans une entreprise globale (58). Base sur une modelisation organisationnelle et sur un modele de gestion (OMM) (90), ce systeme informatique procure une architecture systeme (figure 8) et une interface graphique utilisateur (figure 10) qui facilitent la manipulation d'objets organisationnels (70). Contrairement aux methodes classiques (38), la presente invention distingue le modele Organisation (42) des modeles Processus (44), Applications (36) et Donnees (32). Ainsi, grace a des systemes de modelisation et de conception independants et souples de l'entreprise, il est possible de repercuter les evolutions de l'environnement commercial plus rapidement et de facon plus realiste.

Fulltext Availability:
Detailed Description

Detailed Description

... together or to further divide their organizations.

The present invention can utilize any type of database schema. The different vertical 3o and horizontal partitions of the enterprise correspond naturally to database tables. It is...s information is archived, but is still retrievable. The fact that the present invention provides different stages gives the database the opportunity to handle the information differently than in the prior art. As the data... object types in Table 1:

Definition Manipulation

Organization create, delete show, merge
Member create, delete, copy get, set, move Attribute create, delete, show (dis)associate Attribute Value none get, set Virtual Link create, delete resolve...

1/2,AB,KWIC/4 (Item 4 from file: 349)
DIALOG(R)File 349:PCT Fulltext
(c) 2000 WIPO/MicroPat. All rts. reserv.

00644144

OBJECT SELECTION ACROSS MULTIPLE PROCESSES
SELECTION D'OBJETS PAR DES PROCEDES MULTIPLES

Patent Applicant/Assignee:

CROSSKEYS SYSTEMS CORPORATION, CROSSKEYS SYSTEMS CORPORATION , 350 Terry
Fox Drive, Kanata, Ontario K2K 2W5 , CA

Inventor(s):

DAVIS Stephen, DAVIS, Stephen , 1260 Old Innes Road, Ottawa, Ontario K1B
3Z3 , CA

BOUCHER Jacques, BOUCHER, Jacques , 165 Northwestern Avenue, Ottawa,
Ontario K1Y 0M1 , CA

VIEREGGE Richard, VIEREGGE, Richard , 114 Hobart Crescent, Nepean,
Ontario K2H 5S6 , CA

Patent and Priority Information (Country, Number, Date):

Patent: WO 9927446 A1 19990603

Application: WO 98CA1075 19981119 (PCT/WO CA9801075)

Priority Application: CA 2221648 19971120

Designated States: CA JP US AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL

PT SE

Main International Patent Class: G06F-009/46;

Publication Language: English

Filing Language: English

Fulltext Word Count: 5556

English Abstract

In a method managing data in an object-oriented environment, a common selected object is referenced across multiple processes with the aid of a suitable protocol.

French Abstract

L'invention concerne un procede de gestion de donnees dans un environnement oriente objets. Selon ce procede, un objet selectionne commun est reference par de multiples procedes a l'aide d'un protocole approprie.

Fulltext Availability:

Detailed Description

Detailed Description

... a database to provide

-5 data for display to the operator, the interface to the database will be different for each sub-system.

The drawing functionality is implemented in C. Database accesses specific t...by this object Concurrency: sequential Prototype: BOOL canSave(void)

Description: whether the initial value is different than the database value, application can determine whether a save operation can safely proceed without overwriting changes Concurrency...

...Prototype: virtual BOOL GetAttr(char * attrName, int * attrValue)=0

Description: method will retrieve a single attribute from the local copy of this object data, this method will be overloaded based on the type of data...

...Prototype: virtual BOOL SetAttr(char * attrName, int attrValue)=0

Description: method will set a single attribute into the local copy of this object data, this method will be overloaded based on the type of data...

1/2,AB,KWIC/5 (Item 5 from file: 349)

DIALOG(R) File 349:PCT Fulltext

(c) 2000 WIPO/MicroPat. All rts. reserv.

00631472

METHOD AND SYSTEM FOR DATABASE APPLICATION SOFTWARE CREATION REQUIRING MINIMAL PROGRAMMING

PROCEDE ET SYSTEME DE CREATION DE LOGICIEL D'APPLICATION POUR BASE DE DONNEES REQUERANT UNE PROGRAMMATION MINIMALE

Patent Applicant/Assignee:

TENFOLD CORPORATION, TENFOLD CORPORATION, Suite 100, 180 West Election Road, Draper, UT 84020, US

Inventor(s):

WALKER Jeffrey L, WALKER, Jeffrey, L., 30 Hill Road, Ross, CA 94957, US

Patent and Priority Information (Country, Number, Date):

Patent: WO 9914651 A2 19990325

Application: WO 98US19108 19980915 (PCT/WO US9819108)

Priority Application: US 97932255 19970917

Designated States: AU CA AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

Main International Patent Class: G06F-000/;

Publication Language: English

Filing Language: English

Fulltext Word Count: 16902

English Abstract

A system and method for computer-assisted database management software creation of a target software application from a description known as dictionary (106) interoperating with universal software application (108). Dictionary (106) contents customize universal application (108) into target software application (100) created from a high-level dialog between an application designer and graphical application editor (104). Application editor (104) provides an environment for editing and creating custom applications and automatically creates security partitioning of responsibilities and users, hierarchical menu structures, groupings of database data elements into efficient sets, database transactions and database partitioning without requiring programming in SQL language by an application designer. The computer stores dictionary (106) in a database for accessing by universal application (108). Dictionary (106) customizes re-usable universal application (108) for interaction with relational databases such as Oracle®, IBM® DB2, and Sybase®.

French Abstract

La presente invention concerne un systeme et un procede de creation de logiciel de gestion de base de donnees assiste par ordinateur d'une application logicielle cible a partir d'une description connue sous forme de dictionnaire (106) fonctionnant avec une application logicielle universelle (108). Le contenu du dictionnaire (106) personnalise l'application universelle (108) en une application logicielle cible (100) creee a partir d'un dialogue de niveau eleve entre un concepteur d'application et un editeur (104) d'application graphique. L'editeur (104) d'application fournit un environnement permettant de creer et d'editer des applications personnalisees. L'editeur cree automatiquement un partitionnement de securite des responsabilites et des utilisateurs, des structures hierarchiques de menu, des groupages d'elements de donnees de base de donnees en ensembles efficaces, des transactions de base de donnees et un partitionnement de base de donnees sans qu'un concepteur d'application ait recours a une programmation en langage SQL. L'ordinateur stocke le dictionnaire (106) dans une base de donnees de sorte qu'une application universelle (108) p eut y acceder. Le dictionnaire (106) personnalise une application universelle (108) reutilisable de facon a interagir avec une base de donnees relationnelle telle qu'Oracle®, IBM® et Sybase®.

Fulltext Availability:

Claims

Claim

... dimensions for analysis, drill down to see the details behind any total, look at multiple attributes of the data, copy an analysis for side-by-side visual analysis, transfer analysis information into an industry-standard...systems, generally requires astute manual programming. Data mover module 230 facilitates movement of data across

different database designs, heterogeneous databases , access methods, or file systems located within a network. Data mover module 230 also facilitates...

1/2,AB,KWIC/6 (Item 6 from file: 349)
DIALOG(R) File 349:PCT Fulltext
(c) 2000 WIPO/MicroPat. All rts. reserv.

00579680

FILE DIRECTORY AND FILE NAVIGATION SYSTEM
REPERTOIRE DE FICHIERS ET SYSTEME D'EXPLORATION CORRESPONDANT

Patent Applicant/Assignee:

1VISION SOFTWARE LLC, 1VISION SOFTWARE, L.L.C. , Suite 204, 200 East
Seventh Street, Loveland, CO 80537 , US

Inventor(s):

HOWARD David E, HOWARD, David, E. , 2952 Kiowa Drive, Loveland, CO 80538
, US

GANDEE John J, GANDEE, John, J. , 124 Chestnut Street, Windsor, CO 80550
, US

GODWIN Kurt E, GODWIN, Kurt, E. , 2833 Logan, Loveland, CO 80538 , US

Patent and Priority Information (Country, Number, Date):

Patent: WO 9824025 A1 19980604

Application: WO 97US21837 19971126 (PCT/WO US9721837)

Priority Application: US 9631926 19961127

Designated States: AL AM AT AT AU AZ BA BB BG BR BY CA CH CN CU CZ CZ DE DE
DK DK EE EE ES FI FI GB GE GH HU IL IS JP KE KG KP KR KZ LC LK LR LS LT
LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SK SL TJ TM TR
TT UA UG US UZ VN YU GH KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM
AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA
GN ML MR NE SN TD TG

Main International Patent Class: G06F-011/00;

Publication Language: English

Filing Language: English

Fulltext Word Count: 20459

English Abstract

The parallel virtual directory system (12) can extend the native file system (8) to provide a superior method for organizing a computer system's physical storage devices or locations. These can include hard disks and removable media or remote storage locations such as on Internet. Interceptor modules (2) can monitor all files or memory changes such as creation, writes and deletes to the native file system and can pass this information to the parallel virtual directory system. The parallel virtual directory system may be accessed through the native file system methods allowing users to view their file system as it existed at any point of time, including removable media that is no longer present in the system. The parallel virtual file system may be implemented using database technology allowing multiple views of the file system for an easier navigation through it. Further, a set of management processes (3) can run at the application level providing data management services such as backup, archiving, and recording.

French Abstract

Le systeme de repertoire virtuel parallele (12) de la presente invention permet de developper le systeme de fichiers natif (8) d'un systeme informatique de maniere a en faire un outil perfectionne d'organisation

des dispositifs ou emplacements de stockage physique dudit systeme. Ces dispositifs peuvent notamment etre des disques durs, des supports amovibles ou des emplacements eloignes, par exemple sur Internet. Des modules intercepteurs (2) peuvent controler tous les changements de fichiers ou de memoires du type creation, ecritures et suppressions affectant le systeme de fichier natif et ils peuvent transmettre ces informations au systeme de repertoire virtuel parallele. On peut acceder a ce dernier en utilisant les procedes d'accès au systeme de fichiers natif qui permettent aux utilisateurs de visualiser leur systeme de fichiers tel qu'il se presentait a tout instant, et notamment les supports amovibles qui ne sont plus presents dans le systeme. Ledit systeme virtuel parallele peut etre mis en oeuvre au moyen d'une technologie de base de donnees autorisant de multiples vues du systeme de fichiers aux fins de simplification de la navigation. En outre, un ensemble de processus de gestion (3) peut tourner au niveau application pour assurer des services de gestion de donnees du type sauvegarde, archivage et enregistrement.

Fulltext Availability:

Detailed Description

Detailed Description

... monitored (648), then the virtual directory system can access the new storage medium (620), and copy the file attribute data for the directory structure to the virtual directory (628). If the media is known ...might be elin-dnated or arranged in different orders. Furthermore, subsequent sorts can establish the database into a variety of different combinations or groupings. Hence, the configuration command sequences could group a single virtual directory into...

1/2,AB,KWIC/7 (Item 7 from file: 349)

DIALOG(R)File 349:PCT Fulltext

(c) 2000 WIPO/MicroPat. All rts. reserv.

00577375

A COMMUNICATION SYSTEM ARCHITECTURE

SYSTEME, PROCEDE ET PRODUIT MANUFACTURE POUR L'ARCHITECTURE D'UN SYSTEME DE COMMUNICATION

Patent Applicant/Assignee:

MCI COMMUNICATIONS CORPORATION, MCI COMMUNICATIONS CORPORATION , 1133
19th Street, N.W., Washington, DC 20036 , US

Inventor(s):

ELLIOTT Isaac K, ELLIOTT, Isaac, K. , 3855 Orchard Drive, Colorado
Springs, CO 80920 , US
STEELE Rick D, STEELE, Rick, D. , 6314 Dessbury Drive, Colorado Springs,
CO 80918 , US
GALVIN Thomas J, GALVIN, Thomas, J. , 1085 Milstead Drive, Hiawatha, IA
52233 , US
LAFRENIERE Lawrence L, LAFRENIERE, Lawrence, L. , 3220 Brunswick Drive,
Colorado Springs, CO 80920 , US
KRISHNASWAMY Sridhar, KRISHNASWAMY, Sridhar , 7312 Beckett Drive, N.E.,
Cedar Rapids, IA 52402 , US
FORGY Glen A, FORGY, Glen, A. , 19 Montrose Avenue, Iowa City, IA 52245 ,
US
REYNOLDS Tim E, REYNOLDS, Tim, E. , 3123 Juniper Drive, Iowa City, IA
52245 , US
SOLBRIG Erin M, SOLBRIG, Erin, M. , 3405 Guadalajara Road, S.W., Cedar

Rapids, IA 52404 , US
CERF Vinton, CERF, Vinton , 3614 Camelot Drive, Annadale, VA 22003 , US
GROSS Phil, GROSS, Phil , 20331 Cockerill Road, Purcellville, VA 22132 , US
DUGAN Andrew J, DUGAN, Andrew, J. , 2025 Tabor Court, Colorado Springs,
CO 80919 , US
SIMS William A, SIMS, William, A. , 4930 Townsend Drive, Colorado
Springs, CO 80922 , US
HOLMES Allen, HOLMES, Allen , 5375 Chambrey Court, Colorado Springs, CO
80919 , US
SMITH Robert S II, SMITH, Robert, S., II , 5045 Dorset Lane, Suwanee, GA
30174 , US
KELLY Patrick J III, KELLY, Patrick, J., III , 2710 Briarhurst Drive,
Houston, TX 77057 , US
GOTTLIEB Louis G, GOTTLIEB, Louis, G. , 6639 Foxdale Circle, Colorado
Springs, CO 80919 , US
COLLIER Matthew T, COLLIER, Matthew, T. , 12983 Thistlethorn Drive,
Herndon, VA 20171 , US
WILLE Andrew N, WILLE, Andrew, N. , 3380 Oriole Court, N.E., Cedar
Rapids, IA 52401 , US
RINDE Joseph, RINDE, Joseph , 7706 Fontaine Street, Potomac, MD 20854 ,
US
LITZENBERGER Paul D, LITZENBERGER, Paul, D. , 420 West Oak Street, Wylie,
TX 75098 , US
TURNER Don A, TURNER, Don, A. , 4204 Magnolia Drive, McKinney, TX 75070 ,
US
WALTERS John J, WALTERS, John, J. , 2601 Lexington, McKinney, TX 75070 ,
US
EASTEP Guido M, EASTEP, Guido, M. , 3005 Saint Germain Drive, McKinney,
TX 75070 , US
MARSHALL David D, MARSHALL, David, D. , 1008 Serenade Lane, Richardson,
TX 75081 , US
PRICE Ricky A, PRICE, Ricky, A. , 2991 Hillingdon Drive, Richardson, TX
75082 , US
SALEH Bilal A, SALEH, Bilal, A. , 1205 E. Camp McDonald Road, Prospect
Heights, IL 60070 , US

Patent and Priority Information (Country, Number, Date):

Patent: WO 9823080 A2 19980528
Application: WO 97US21174 19971114 (PCT/WO US9721174)
Priority Application: US 96751203 19961118; US 96751668 19961118; US
96752271 19961118; US 96758734 19961118; US 96751209 19961118; US
96751661 19961118; US 96752236 19961118; US 96752487 19961118; US
96752269 19961118; US 96751923 19961118; US 96751658 19961118; US
96752552 19961118; US 96751933 19961118; US 96751663 19961118; US
96746899 19961118; US 96751915 19961118; US 96752400 19961118; US
96751922 19961118; US 96751961 19961118

Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES
FI GB GE GH HU IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN
MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU
ZW GH KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH DE DK ES
FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD
TG

Main International Patent Class: H04M-011/06;

Publication Language: English

Filing Language: English

Fulltext Word Count: 188452

English Abstract

Telephone calls, data and other multimedia information is routed through a hybrid network which includes transfer of information across the internet. A media order entry captures complete user profile information for a user. This profile information is utilized by the system throughout the media experience for routing, billing, monitoring, reporting and other media control functions. Users can manage more aspects of a network than previously possible, and control network activities from a central site.

French Abstract

Des appels telephoniques, des donnees et autres informations multimedias sont achemines par un reseau hybride capable egalement de transmission de donnees par l'Internet. Une rubrique d'ordonnancement des supports utilise en mode exclusif des informations completes de profils utilisateurs concernant un meme utilisateur. Ces informations de profils sont utilisees par le systeme, pendant toute la duree active du support, a des fins d'acheminement, de facturation, de surveillance, de compte-rendu et autres fonctionnalites de gestion de supports. Les utilisateurs peuvent ainsi gerer un plus grand nombre de fonctionnalites reseau et gerer des activites reseau depuis un site central.

Fulltext Availability:

Detailed Description

Detailed Description

... 287

1. Class Hierarchy 287

2. Class and Object details 289

F. Video Operator Shared Database 306

1. Database Schema 306

G. Video Operator Console Graphical ...specified view of the local copy of data;

- Insert, Update, or Delete of the local copy of data; o Synchronize subscribed data with the dbServer; and o Expiration notifications from dbServer...

1/2,AB,KWIC/8 (Item 8 from file: 349)

DIALOG(R)File 349:PCT Fulltext

(c) 2000 WIPO/MicroPat. All rts. reserv.

00564762

SYSTEMS AND METHODS FOR SECURE TRANSACTION MANAGEMENT AND ELECTRONIC RIGHTS PROTECTION

SYSTEMES ET PROCEDES DE GESTION DE TRANSACTIONS SECURISEES ET DE PROTECTION DE DROITS ELECTRONIQUES

Patent Applicant/Assignee:

INTERTRUST TECHNOLOGIES CORP, INTERTRUST TECHNOLOGIES CORP. , 460 Oakmead Parkway, Sunnyvale, CA 94086 , US

Inventor(s):

GINTER Karl L, GINTER, Karl, L. , 10404 43rd Avenue, Beltsville, MD 20705 , US

SHEAR Victor H, SHEAR, Victor, H. , 5203 Battery Lane, Bethesda, MD 20814 , US

SIBERT W Olin, SIBERT, W., Olin , 30 Ingleside Road, Lexington, MA 02173-2522 , US

SPAHN Francis J, SPAHN, Francis, J. , 2410 Edwards Avenue, El Cerrito, CA
94530 , US
VAN WIE David M, VAN WIE, David, M. , 1250 Lakeside Drive, Sunnyvale, CA
94086 , US

Patent and Priority Information (Country, Number, Date):

Patent: WO 9809209 A1 19980305
Application: WO 97US15243 19970829 (PCT/WO US9715243)
Priority Application: US 96706206 19960830

Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES
FI GB GE GH HU IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN
MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW
GH KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH DE DK ES FI
FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG

Main International Patent Class: G06F-001/00;

Publication Language: English

Filing Language: English

Fulltext Word Count: 190955

English Abstract

The present invention provides systems and methods for electronic commerce including secure transaction management and electronic rights protection. Electronic appliances such as computers employed in accordance with the present invention help to ensure that information is accessed and used only in authorized ways, and maintain the integrity, availability, and/or confidentiality of the information. Secure subsystems used with such electronic appliances provide a distributed virtual distribution environment (VDE) that may enforce a secure chain of handling and control, for example, to control and/or meter or otherwise monitor use of electronically stored or disseminated information. Such a virtual distribution environment may be used to protect rights of various participants in electronic commerce and other electronic or electronic-facilitated transactions. Secure distributed and other operating system environments and architectures, employing, for example, secure semiconductor processing arrangements that may establish secure, protected environments at each node. These techniques may be used to support an end-to-end electronic information distribution capability that may be used, for example, utilizing the "electronic highway".

French Abstract

La presente invention concerne des systemes et des procedes de commerce electronique comprenant une gestion de transactions securisees et la protection de droits electroniques. Des appareils electroniques tels que des ordinateurs utilises conformement a la presente invention contribuent a assurer que l'accès aux informations et l'utilisation des informations ne se font que par des voies autorisees et ils maintiennent l'integrite, la disponibilite et/ou la confidentialite des informations. Des sous-systemes securises utilises avec ces appareils electroniques constituent un environnement de distribution virtuel (VDE) reparti pouvant faire valoir une chaine securisee de traitement et de commande, par exemple, pour commander et/ou mesurer ou encore controler l'utilisation d'informations memorisees ou disseminees electroniquement. Cet environnement de distribution virtuel peut etre utilise pour proteger les droits de divers participants dans le commerce electronique et dans d'autres transactions electroniques ou dans lesquelles intervient l'electronique. Des environnements et des architectures de systemes repartis securises et autres systemes d'exploitation emploient, par exemple, des arrangements de traitement a semi-conducteurs securises

pouvant etabliir des environnments proteges securises a chaque noeud. On peut utiliser ces techniques pour apporter un soutien a une capacite de distribution d'informations electroniques de bout-en-bout pouvant etre utilisees, par exemple, en empruntant l'"autoroute electronique".

Fulltext Availability:
Detailed Description

Detailed Description

... and reference/record keeping information resources (such as business, medical, legal, scientific, governmental, and consumer databases).

Electronic rights protection provided by the present invention will also provide an important foundation for...appliance usage, including electronic credit and/or currency mechanisms for payment means; (3) Secure distributed database means for storing control and usage related information (and employing validated compartmentalization and tagging schemes...may be automatically made, either through a clearinghouse, or directly, to different content providers for different potions.

enable flexible metering of, or other collection of information related to, use of electronic...also, under VDE (if allowed by senior control information), collect audit information reflecting usage of database fields by different individuals and client organization departments and ensure that differing rights of access and differing budgets... distributed product such as accepting distributor charges for content use and agreeing to observe the copyright rights of the creator. A third agreement might exist between the distributor and a financial... appropriate "rules -and controls," content and its associated "rules and controls" may be distributed at different times, in different ways, by different VDE participants. The ability of VDE to securely distribute and

-168 enforce "rules and controls...106 and the content creator 102 may be the same person, or they may be different people. For example, a musical performing group may act as both content creator 102 and...will in the future be) delivered. "Rules and controls" may be delivered over a path different from the one used for content delivery. "Rules and controls" may also be delivered at...programs 608, objects 300 containing

-201 VDE controlled property content and related information, and management database 610 that stores both information associated with objects and VDE control information. ROS 602 includes...small appliance that typically has low levels of usage by one user may LMplement a database service using very different techniques than a very large appliance with high levels of usage by many users. This...a component assembly 690(k) showing Figure 11I. These same components can be combined in different ways (e.g., with more or less components) to form different component assemblies 690 providing...not be " mountable.- In this case, a LOAD call will make a connection to a database manager 7--~0 and ensure that records are readable, An OPEN c -all may create... translate between the two schemes, a SRN reference may be replaced with a VDE ID database reference wherever it occurs, Similarly, VDE IDs that are used as indices or references to...e.g., through gateway 734) to cause the SPE to obtain appropriate information from secure database 610, generate appropriate database items, and store the database items into the secure database 610 and/or provide them in encrypted,

protected form to...

1/2,AB,KWIC/9 (Item 9 from file: 349)
DIALOG(R)File 349:PCT Fulltext
(c) 2000 WIPO/MicroPat. All rts. reserv.

00532013

AN AUTOMATED COMMUNICATIONS SYSTEM AND METHOD FOR TRANSFERRING INFORMATION
BETWEEN DATABASES IN ORDER TO CONTROL AND PROCESS COMMUNICATIONS
SYSTEME ET PROCEDE DE COMMUNICATIONS AUTOMATISES POUR LE TRANSFERT
D'INFORMATIONS ENTRE DES BASES DE DONNEES A DES FINS DE COMMANDE ET DE
TRAITEMENT DES COMMUNICATIONS

Patent Applicant/Assignee:

INTERMIND CORPORATION

Inventor(s):

REED Drummond Shattuck
HEYMANN Peter Earnshaw
MUSHERO Steven Mark
JONES Kevin Benard
OBERLANDER Jeffrey Todd
BANAY Dan

Patent and Priority Information (Country, Number, Date):

Patent: WO 9732251 A1 19970904

Application: WO 97US3205 19970228 (PCT/WO US9703205)

Priority Application: US 96609115 19960229; US 96722314 19960927

Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES
FI GB GE HU IL KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO
NZ PL PT RO RU SG SI SK TJ TM TR TT UA UG UZ VN GH KE LS MW SD SZ UG AM
AZ BY KG KZ MD TM AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF
BJ CF CG CI CM ML MR NE SN TD TG

Main International Patent Class: G06F-011/00;

International Patent Class: G06F-011/16; G06F-013/00; G06F-015/00;

G06F-015/16; G06F-015/30; G06F-017/30; H04M-015/00;

Publication Language: English

Fulltext Word Count: 92880

English Abstract

An automated communications system operates to transfer data, metadata, and methods from a provider computer (1) to a consumer computer (2) through a communications network (3). The transferred information controls the communications relationship, including responses by the consumer computer (2), updating of information, and process for future communications. Information which changes in the provider computer (1) is automatically updated in the consumer computer (2) through the communications system (3) in order to maintain continuity of the relationship. Transfer of metadata and methods permits intelligent processing of information by the consumer computer (2) and combined control by the provider and consumer of the types and content of information subsequently transferred.

French Abstract

Cette invention se rapporte a un systeme de communications automatise qui sert au transfert de donnees, de metadonnees et de procedes a partir d'un ordinateur fournisseur (1) a destination d'un ordinateur consommateur (2) par l'intermediaire d'un reseau de communications (3). Les informations transferees commandent la relation de communication, y compris les

reponses par l'ordinateur consommateur (2), la mise a jour des informations et des operations de traitement en vue des communications futures. Les informations qui changent dans l'ordinateur fournisseur (1) sont automatiquement mises a jour dans l'ordinateur consommateur (2) par l'intermediaire du systeme de communications (3), afin de maintenir la continuite de la relation. Le transfert des metadonnees et des procedes permet un traitement intelligent des informations par l'ordinateur consommateur (2) et une commande combinee par le fournisseur et le consommateur des types et du contenu des informations ulterieurement transferees.

Fulltext Availability:

Detailed Description

Detailed Description

... information contained in the provider database can be transferred and used in communications relationships with different consumers. The provider database includes information associating the information with each potential recipient. The association information is used to...to the existing information to determine what has been updated. The consumer program maintains a database of information from different providers. When updated information is received, the consumer program executes instructions associated with the information...scheduled event loop of the consumer or provider program.

FIG. 17 Illustrates the object oriented database structures for different communications object types.

FIG. 18 illustrates object oriented data structures used for distribution control.

FIG...communications object are the equivalent of URLs within a Web document. They create associations between different elements of an object, different pages of an object, or different communications objects. A link element can also be a URL, linking the element to any... of the type definition 144 for each required or desired attribute to automatically identify and copy these attributes from elements 143 in the provider database I I to elements 143 in the directory...

1/2,AB,KWIC/10 (Item 10 from file: 349)
DIALOG(R)File 349:PCT Fulltext
(c) 2000 WIPO/MicroPat. All rts. reserv.

00519569

STRUCTURED FOCUSED HYPERTEXT DATA STRUCTURE

STRUCTURE DE DONNEES HYPERTEXTE ARTICULEE SUR LA STRUCTURATION

Patent Applicant/Assignee:

HYPERMED LTD

OREN Avraham

OLCHA Lev

KOWALSKI Nahum

MARGULYAN Rita

Inventor(s):

OREN Avraham

OLCHA Lev

KOWALSKI Nahum

MARGULYAN Rita

Patent and Priority Information (Country, Number, Date):

Patent: WO 9717666 A2-A3 19970515

Application: WO 96IL131 19961023 (PCT/WO IL9600131)

Priority Application: US 95551929 19951023

Designated States: AL AM AT AU AZ BB BG BR BY CA CH CN CZ DE DK EE ES FI GB

GE HU IS JP KE KR KZ LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO

RU SD SE SG SI TM TR TT UA UG US UZ VN KE LS MW SD SZ UG AM AZ BY KG KZ

MD RU TJ TM AT DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI

CM GA GN ML MR TD TG

Main International Patent Class: G06F-017/30;

International Patent Class: G06F-017/21;

Publication Language: English

Fulltext Word Count: 247230

English Abstract

A hypertexted data structure (3/16) stored on a computer readable memory device and organized in a hierarchy of at least two levels, the data structure comprising: a plurality of data units (18-20) positioned at different levels in the hierarchy each containing at least some textual information (23) and a plurality of hypertext links (1) each linking at least part of the textual information in a given source data unit to a target data unit; wherein at least one of the hypertext links (1) is linked to at least one hypertext node (34) which contains information relating at least to both the given source data unit and the target data unit from which the relative positions in the hierarchy of the given source and target data units linked by the hypertext link may be determined.

French Abstract

La presente invention concerne une structure de donnees en format hypertexte (3/16) stockees dans une memoire lisible par ordinateur et organisee selon une hierarchie comportant au moins deux niveaux. Cette structure de donnees est constituee, d'une part de plusieurs unites de donnees (18-20) se placant a differents niveaux de la hierarchie, chacune de ces unites de donnees contenant au moins quelques donnees textuelles (23), et d'autre part, d'un jeu de liens hypertexte (1), chacun de ces liens reliant au moins une partie de l'information textuelle d'une unite de donnees origine specifique a une unite de donnees cible. L'un au moins des liens hypertexte (1) est relie a l'un au moins des noeuds hypertexte (34) qui contient des donnees se rapportant au moins a la fois a l'unite de donnees origine specifique et a l'unite de donnees cible a partir de laquelle il est possible de determiner des positions relatives dans la hierarchie. Ces positions relatives sont celles des unites de donnees origine et cible reliees par le lien hypertexte.

Fulltext Availability:

Claims

Claim

... Global Const DASH-DOT = 4 '4 - '3 - Mask Not Pen Dash-Dot Global Const NOT-COPY -PEN 4 'Global Const DASH-DOT-DOT = 5' 4 - Not Copy Pen - Dash-Dot-Dot...APPENDONLY OLE - CREATE - FROM-FILE = I = &H8 'from ole1 control Global Const Global Const OLE COPY = 4 DATA INCONSISTENT = &H 10 Global Const OLE PASTE = 5 Global Const DATA-CONSISTENT Global... records in the screen table + I Set queCopyToScreenTable ScreenTable(" Screen ID dbH ypertext. OpenQueryDe ff" Copy NumScreens Default Screen

```

Chapter to screen ScreenTable(" Screen Name") Table") NewName
queCopyToScreenTable. Execute ScreenTable("Locking...CRPosition As
Integer End Sub CRPosition = InStr(strArg, ChrS(13)) Do Until CRPosition
= 0 Sub CopyRecord (tblDefFrom As Mid$(strArg, CRPosition, 2) TableDef,
tblDefTo As TableDef, Chr$(I 0) tblFrom As...Dim StartFrom As Integer If
Len(Arg) <= 2 Then End Sub StartFrom = I Else Sub CopyTableB -ByName
(dbFrom StartFrom = Len(Arg) - I As Database, dbTo As Database, End If
TableNameFrom As...dbMarks. OpenQueryDef(" Delete all Set WorkAroundBug =
Nothing bookmarks") querCleanTable.Execute Set querCleanTable = Nothing
querCleanTable.Close CopyTableB - ByName dbMarksOld, End Sub dbMarks,
"Bookmarks", "Bookmarks", FieldNotForCopy( TRINT.BAS WorkAroundB ug.
Close Option Explicit...

```

```

...querCleanTable.Close Const CopyTableB-ByName dbMarksOld,
PAGE-NUMBERJONT-SIZE = 10 dbMarks, "LastUserTabl", Const "LastUserTabl",
FieldNotForCopy( COPYRIGHT -STRING-FONT-SIZE WorkAroundBug.Close = 5.8
'Printmarks Dim ConnectScreensOnPrint As Set WorkAroundBug IntegerBoolean
dbMarksOld...As & NameElem I String, occ As Long) Case "Ito I ShowElem is
" & 'this routine is different from Show parameter & " word apart from
Number Found only in that Result = "(" & ' it displays a...Record Count:
0 Columns Name Type Size ID Number (Long) 4 Allow Zero Length: No
Attributes : Fixed Size, Auto-Increment Collating Order: Unknown or
Undefined Column Hidden: No Column Order: 1...

```

1/2,AB,KWIC/11 (Item 11 from file: 349)
DIALOG(R)File 349:PCT Fulltext
(c) 2000 WIPO/MicroPat. All rts. reserv.

00435498

AN INTEGRATED DEVELOPMENT PLATFORM FOR DISTRIBUTED PUBLISHING AND
MANAGEMENT OF HYPERMEDIA OVER WIDE AREA NETWORKS
PLATE-FORME DE DEVELOPPEMENT INTEGREE POUR LA PUBLICATION ET LA GESTION
REPARTIES D'HYPERMEDIA SUR DES RESEAUX LONGUE PORTEE

Patent Applicant/Assignee:

NAVISOFIT INC

Inventor(s):

DOZIER Linda T

WILLIAMS George W V

LONG Dave

MCKEE Douglas M

DAVIDSON James G

BRADY Karen

Patent and Priority Information (Country, Number, Date):

Patent: WO 9630846 A1 19961003

Application: WO 96US1686 19960321 (PCT/WO US9601686)

Priority Application: US 95412981 19950328

Designated States: AL AM AT AU AZ BB BG BR BY CA CH CN CZ DE DK EE ES FI GB

GE HU IS JP KE KR KZ LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO

RU SD SE SG SI TM TR TT UA UG UZ VN KE LS MW SD SZ UG AT BE CH DE DK ES

FI FR GB GR IE MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG

Main International Patent Class: G06F-017/30;

Publication Language: English

Fulltext Word Count: 162571

English Abstract

The present invention addresses the critical needs of publishers seeking

to create and publish hypermedia content in electronic form across wide area networks ("WAN's") such as the World Wide Web. Toward this end, a client-server development platform is provided for handling the important functions of document authoring, content-based indexing and retrieval of documents, management and control of proprietary assets, and support for developing form-driven interactive services, all in a manner that is uniquely and seamlessly WAN-integrated.

French Abstract

Le systeme selon l'invention repond aux besoins cruciaux des editeurs desireux de creer et de publier le contenu d'hypermedia sous forme electronique dans des reseaux longue portee tels que le reseau WWW (World Wide Web). Pour ce faire, une plate-forme de developpement de serveur/client est produite pour gerer les fonctions importantes de creation de documents, indexation basee sur le contenu et d'extraction de documents, de gestion et de controle des actifs prives, et de support pour le developpement de services interactifs a base de masque, l'ensemble de maniere integree, de maniere unique et transparente aux reseaux a longue portee.

Fulltext Availability:

Detailed Description

Detailed Description

... be associated with various specifications such as a required data type, and whether or not database entries in the table will be indexed (and hence searchable) using that field. As indicated...Forward Button
2-3
for the NaviServer 5-2 G
contains operator 5-3 Get Attribute 3-5
Copy icon 3-7 ghost files
copying MiniWebs 4-3 definition 4-2
copying text 3...

1/2,AB,KWIC/12 (Item 12 from file: 349)
DIALOG(R)File 349:PCT Fulltext
(c) 2000 WIPO/MicroPat. All rts. reserv.

00390861

DISTRIBUTED DATA BASE SYSTEM

SYSTEME DE BASE DE DONNEES REPARTIES

Patent Applicant/Assignee:

TELEFONAKTIEBOLAGET L M ERICSSON

Inventor(s):

SAMUELSSON Bo Mikael

BJORNERSTEDT Anders

Patent and Priority Information (Country, Number, Date):

Patent: WO 9522111 A1 19950817

Application: WO 95SE118 19950206 (PCT/WO SE9500118)

Priority Application: SE 94410 19940208

Designated States: AU BR CN FI JP KR MX NO AT BE CH DE DK ES FR GB GR IE IT

LU MC NL PT SE

Main International Patent Class: G06F-017/30;

Publication Language: English

Fulltext Word Count: 9377

English Abstract

In a distributed data base system different parts of a data base are handled by each a number of interconnected processors (54, 74). The different data base parts contain a number of data entities (58, 66, 66', 93), there being provided for each of such data entities global information (82) relating to the processor in which the data entity is located, and local information (79, 80, 84) relating to the location of the data entity in the own processor. The global information (82) is located in each processor in the system in the form of global information common to and specific for each one of sets of data entities which have been defined beforehand. More particularly said sets of data entities comprise distribution entities of which each includes information relating to a number of instances of a certain type of data entities located in a certain processor, and information by means of which the address to this processor can be found.

French Abstract

Differentes parties d'un systeme de base de donnees reparties sont manipulees chacune par un certain nombre de processeurs interconnectes (54, 74). Elles contiennent un certain nombre d'entites de donnees (58, 66, 66', 93) et, pour chaque entite de donnees, des informations globales (82) relatives au processeur dans lequel l'entite est situee, et des informations locales (79, 80, 84) concernant l'emplacement de l'entite de donnees dans son propre processeur. Il y a donc, dans chaque processeur du systeme, des informations globales (82), communes et specifiques a chaque serie d'entites de donnees, definie prealablement. En particulier, ces series d'entites de donnees comprennent des entites de repartition contenant chacune des informations fournissant des exemples pour un type d'entite de donnees dans un certain processeur, et des informations pour retrouver l'adresse d'accès audit processeur.

Fulltext Availability:

Detailed Description
Claims

English Abstract

In a distributed data base system different parts of a data base are handled by each a number of interconnected processors (54, 74). The different data base parts contain a number of data entities (58, 66, 66', 93), there being provided for...

Detailed Description

Distributed data base system..

Technical ar The present invention generally relates to a distributed data base system in which different parts of a data base are handled by one each of a number of interconnected processors, the different data base parts containing a number of data entities.

More particularly the invention relates to data base...a first aspect of the invention the above objects have been attained in a distributed data base system in which different parts of a database are handled by one each of a number of interconnected processors. The different database parts include a number of data entities. For each such data entity there is global...to the data entity and an identification number for the class in question. In said data base system different parts of a database are handled by one each of a number of interconnected

processors. The different database parts contain a number of data entities of the kind just referred to above, and...

...base system, a data entity belonging to a specific class of data entities. In said data base system different parts of a database are handled by one each of a number of interconnected processors. The different database parts contain a number of data entities of the kind just referred to above, and...

...stated objects are attained, according to the invention, by a distribution entity in a distributed database system, in which different parts of a data base are handled by each of a number of interconnected processors. Said different database parts contain a number of data entities. Said distribution entity includes information regarding a number...

...stated objects are attained, according to the invention, by a distribution entity in a distributed database system, in which different parts of a database are handled by each of a number of interconnected processors. Said different database parts contain a number of data entities. Said distribution entity includes information common and specific an identity entity for a data entity in a distributed database system, in which different parts of a database are handled by each of a number of interconnected processors. The different database parts contain a number of data entities. Said identity entity includes first information regarding a...the processor 54 a copy 66" of the object 661, the user process 52 accessing attributes in the copy 66", indicated by an arrow 721, by means of the agent object 70. This will...

Claim

... distributed database system, including a data base, and a number of interconnected processors for handling different parts of said data base, said data base parts including a number of data entities, each such data entity having...

...distributed database system, including a data base, and a number of interconnected processors for handling different parts of said data base, said data base parts including a number of data entities, each such data entity having...distributed database system, including a data base, and a number of interconnected processors for handling different parts of said data base, said data base parts including a number of data entities, each such data entity having...

...to the processor that has started the access.

a. A distribution entity in a distributed database system, in which different parts of a data base are handled by each of a number of interconnected processors, the different database parts containing a number of data entities, said distribution entity including information regarding a number...as well as information identifying the data entity.

10. A distribution entity in a distributed database system, in which different parts of a database are handled by each of a number of interconnected processors, the different database parts including a number of data entities, said distribution entity containing information common and specific...

...information identifying the data entity.

12. Identity entity for a data entity in a distributed database system, in which different parts of a database are handled by each of a number of interconnected processors, the different database parts containing a number of data entities, said identity entity including information regarding a distribution...

1/2,AB,KWIC/13 (Item 13 from file: 349)
DIALOG(R)File 349:PCT Fulltext
(c) 2000 WIPO/MicroPat. All rts. reserv.

00372773

METHOD AND APPARATUS FOR GENERATION OF CODE FOR MAPPING RELATIONAL DATA TO OBJECTS

PROCEDE ET APPAREIL DE GENERATION DU CODE DE MISE EN CORRESPONDANCE DE DONNEES RELATIONNELLES AVEC DES OBJETS

Patent Applicant/Assignee:

PERSISTENCE SOFTWARE INC

Inventor(s):

HENNINGER Derek P

JANSEN Richard H

KEENE Christopher T

Patent and Priority Information (Country, Number, Date):

Patent: WO 9503586 A1 19950202

Application: WO 94US7890 19940714 (PCT/WO US9407890)

Priority Application: US 9395322 19930721

Designated States: CA JP KR AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE

Main International Patent Class: G06F-015/40;

Publication Language: English

Fulltext Word Count: 11765

English Abstract

A method and apparatus are provided for using an object model (20) of an object-oriented application to automatically map information (50) between an object-oriented application and a structured database (9), such as a relational database. This is done by taking into account all of the semantics (implications) of an object model, such as inheritance and relationships among object classes, and using these semantics to generate a minimal set of routines (F, G, H, J) for each object class that manipulate the object and other objects to which it is related or from which it inherits. The generated routines, when executed, provide transparent access to relational data or other field-delimited data. Object classes and routines generated using the method encapsulate all the details of database access, such that developers (computer programmers) can write object-oriented applications using those object classes without an explicit reference to or knowledge of the underlying database or its structure.

French Abstract

L'invention concerne un procede et un appareil permettant d'utiliser un modele objet (20) pour une application orientee objet et une base de donnees structuree (9) telle qu'une base de donnees relationnelle. Pour ce faire, il est tenu compte de toute la semantique (de ses implications) d'un modele objet, telle que l'heritage et les relations entre les classes d'objets, et l'on se sert de cette semantique pour generer une

serie minimale de routines (F; G; H; J) pour chaque classe d'objets, qui manipulent l'objet ou les autres objets avec lesquels il est en relation ou dont il herite. Les routines generees assurent, au moment de leur execution, l'accès en mode transparent aux donnees relationnelles ou a d'autres donnees delimitees par champs. Les classes d'objets et les routines generees selon ce procede encapsulent tous les details de l'accès a la base de donnees, de sorte que les concepteurs (programmeurs) peuvent ecrire des applications orientees objet en se servant de ces classes d'objets sans faire explicitement reference a la base de donnees sous-jacente ou a sa structure, ou sans la connaitre.

Fulltext Availability:

Detailed Description
Claims

Detailed Description

... whatsoever to the structured database.

The method can be used also with two or more different databases , with the object model transparently integrating them. The invention can be used where a site...

Claim

... between a child object class and a parent object class of said object model by copying attributes of said parent object class into a table described by said database schema corresponding to...

1/2,AB,KWIC/14 (Item 14 from file: 349)
DIALOG(R) File 349:PCT Fulltext
(c) 2000 WIPO/MicroPat. All rts. reserv.

00252179

STEREOLITHOGRAPHIC BEAM PROFILING
PROFILAGE DE FAISCEAU STEREOLITHOGRAPHIQUE

Patent Applicant/Assignee:

3D SYSTEMS INC

Inventor(s):

SPENCE Stuart Thomas

TARNOFF Harry

ALMQUIST Thomas

Patent and Priority Information (Country, Number, Date):

Patent: WO 8911085 A1 19891116

Application: WO 89US1559 19890417 (PCT/WO US8901559)

Priority Application: US 88182830 19880418; US 88268816 19881108; US 88268837 19881108; US 88268907 19881108; US 88269801 19881108

Designated States: JP KR

Main International Patent Class: G01J-001/00;

International Patent Class: G01B-011/14; B32B-001/10;

Publication Language: English

Fulltext Word Count: 243557

English Abstract

An apparatus and a method for profiling the intensity of a beam and thus measuring the overall intensity and power of a beam are disclosed that have particular use in stereolithography. A beam sensor (35) comprising a pinhole (45) in a plate (40) and a photodetector (55) behind the pinhole

measures the intensity of portions of a beam (50) as the beam is moved over the beam sensor. Software associated mechanism for the beam so that the beam is shifted to find the pinhole and move across it in order to develop the intensity profile. The invention can be used to detect drift in the scanning mechanism, determine the focus of the beam, and predict the depth and width of photopolymer cured by the beam. A related apparatus and method for calibrating and normalizing a stereolithographic apparatus is described, and a related apparatus and method for correcting for drift in production of objects by stereolithography, is also described.

French Abstract

On a mis au point un appareil et un procede permettant de profiler l'intensite d'un faisceau et ainsi de mesurer l'intensite et la puissance globales d'un faisceau, lesquels ont une utilisation particuliere en stereolithographie. Un capteur (35) de faisceau comprenant un trou d'epingle (45) situe dans une plaque (40) ainsi qu'un photodetecteur (55) situe derriere le trou d'epingle, mesure l'intensite de parties d'un faisceau (50) a mesure que l'on deplace le faisceau sur le capteur de faisceau. Le logiciel associe aux capteurs se trouvant dans un ordinateur, commande le mecanisme de balayage du faisceau de sorte que ledit faisceau est decale pour trouver le trou d'aiguille et se deplace au-dessus de ce dernier afin de mettre au point le profile d'intensite. On peut utiliser l'invention pour detecter la derive dans le mecanisme de balayage, determiner la focalisation du faisceau, et predire la profondeur et la largeur de photopolymere durci par le faisceau. On a mis au point un appareil et un procede permettant de calibrer et de normaliser un appareil stereolithographique, ainsi qu'un appareil et un procede permettant de corriger la derive dans la production d'objets par stereolithographie.

Fulltext Availability:

Claims

Claim

... move the Z stage up
and down during part building.

TENSILE STRENGTH This is an attribute of a material which defines the energy required to stretch it.

TRAPPED VOLUMES These are...

1/2,AB,KWIC/15 (Item 15 from file: 349)
DIALOG(R)File 349:PCT Fulltext
(c) 2000 WIPO/MicroPat. All rts. reserv.

00251613

CAD/CAM STEREOLITHOGRAPHIC DATA CONVERSION
CONVERSION DE DONNEES STEREOLITHOGRAPHIQUES CAD/CAM
Patent Applicant/Assignee:

3D SYSTEMS INC

Inventor(s):

HULL Charles William
SPENCE Stuart Thomas
ALBERT David J
SMALLEY Dennis Rollette

HARLOW Richard A
STEINBERG Philip
TARNOFF Harry L
NGUYEN Hop D
LEWIS Charles Williams
VORGITCH Tom J
REMBBA David Z

Patent and Priority Information (Country, Number, Date):

Patent: WO 8910256 A1 19891102
Application: WO 89US1561 19890417 (PCT/WO US8901561)
Priority Application: US 88182830 19880418; US 88269801 19881108; US
89331644 19890331

Designated States: JP KR

Main International Patent Class: B29C-067/24;

International Patent Class: G11C-013/02; B32B-001/10;

Publication Language: English

Fulltext Word Count: 414314

English Abstract

An improved stereolithography system for generating a three- dimensional object (30) by creating a cross-sectional pattern of the object to be formed at a selected surface (23) of a fluid medium (22) capable of altering its physical state in response to appropriate synergistic stimulation by impinging radiation, particle bombardment or chemical reaction, information defining the object being specially processed to reduce curl and distortion, and increase resolution, strength, accuracy, speed and economy of reproduction even for rather difficult object shapes, the successive adjacent laminae (30a, 30b, 30c), representing corresponding successive adjacent cross-sections of the object, being automatically formed and integrated together to provide a stepwise laminar buildup of the desired object, whereby a three- dimensional object is formed and drawn from a substantially planar surface of the fluid medium during the forming process. The conversion of CAD/CAM data descriptive of the object into stereolithographic data used to trace cross-sections of the object is described.

French Abstract

L'invention concerne un systeme de stereolitographie ameliore permettant de generer un objet tridimensionnel (30) en creant une configuration en coupe de l'objet a former au niveau d'une surface selectionnee (23) d'un milieu de fluide (22) pouvant modifier son etat physique en reponse a une stimulation synergetique appropriee par envoi d'une radiation, bombardement de particules ou reaction chimique, des informations definissant l'objet specialement traite pour reduire les ondulations et la distorsion et augmenter la resolution, la force, la precision, la vitesse et l'economie de reproduction meme pour des formes d'objets plutot difficiles, les couches adjacentes successives (30a, 30b, 30c) representant des sections adjacentes successives correspondantes de l'objet, lesquelles sont formees automatiquement et integrees pour creer l'objet par accumulation laminaire, de sorte qu'un objet tridimensionnel est forme et dessine a partir d'une surface sensiblement plane du milieu fluide pendant le processus de formation. La conversion de donnees CAD/CAM decrivant l'objet en donnees stereolitographiques utilisees pour tracer des sections de l'objet est decrite.

Fulltext Availability:

Claims

Claim

... model

Prepare model for stereolithography
Section model into triangles and reduce data for transmission Transmit
data file to SLA-1 slice computer Slice triangle files horizontally
Calculate vectors and add hatch...with the extension ".UIZ") that is used
by, SLICE to generate different-spaced layers for different sections of
a part.

3.5.1 UI Overview

The complex nature of using SLICE...

1/2,AB,KWIC/16 (Item 1 from file: 653)
DIALOG(R)File 653:US Pat.Fulltext
(c) format only 2000 The Dialog Corp. All rts. reserv.

01722565

Utility

META-INTERPRETER

PATENT NO.: 4,787,035
ISSUED: November 22, 1988 (19881122)
INVENTOR(s): Bourne, David A., Pittsburgh, PA (Pennsylvania), US (United
States of America)
ASSIGNEE(s): Westinghouse Electric Corp , (A U.S. Company or Corporation)
, Pittsburgh, PA (Pennsylvania), US (United States of America)
[Assignee Code(s): 91840]
EXTRA INFO: Assignment transaction [Reassigned], recorded September 20,
1989 (19890920)
Assignment transaction [Reassigned], recorded June 24,
1999 (19990624)
APPL. NO.: 6-788,650
FILED: October 17, 1985 (19851017)
U.S. CLASS: 395-82 cross ref: 364-DIG.001; 364-221.9; 364-225; 364-226.7;
364-260.4; 364-260.6; 364-260.9; 364-274; 364-274.1; 364-274.2
; 364-274.3; 364-274.5; 364-274.7; 364-275.1; 364-275.2;
364-275.3; 364-275.9; 364-280.4; 364-282.1; 364-284; 364-284.3
; 364-973
INTL CLASS: [4] G06F 9-00
FIELD OF SEARCH: 364-300

OTHER REFERENCES

Foster, D. M., "A Simple List-Processing Interpreter," The Computer
Journal, vol. 6, Issue 2, Jul. 1965, pp. 120-129, L 7140 1358.

Bourne et al., "Autonomous Manufacturing: Automating the Job-Shop, IEEE,
Sep., 1984, pp. 76-86.

Bourne et al., "Designing Programming Languages for Manufacturing Cells,"
Robotics Institute, Carnegie Mellon University, Apr., 1982, pp. 1-18.

Bourne, "Artificial Intelligence in Flexible Manufacturing", Robotics
Institute, Carnegie Mellon University, pp. 66-76.

Fussell et al, "A Design of A Controller as a Component of a Robotic Manufacturing System," Robotics Inst., Carnegie Mellon Univ., Journal of Manufacturing Systems, vol. 3, No. 1, pp. 1-11.

Bourne, "A Numberless Tensed Language for Action Oriented Tasks", The Robotics Institute, Carnegie Mellon University, Oct., 1982, pp. 1-19.

Bourne et al, "Designing Programming Languages for Manufacturing Cells, The Robotics Institute, Carnegie-Mellon University, Apr. 1982, pp. 1-17.

PRIMARY EXAMINER: Zache, Raulfe B.

ATTORNEY, AGENT, OR FIRM: Hawranko, G. E.

CLAIMS: 19

EXEMPLARY CLAIM: 1

DRAWING PAGES: 24

DRAWING FIGURES: 53

ART UNIT: 232

FULL TEXT: 2240 lines

ABSTRACT

The present invention includes an interpreter in which a parser examines a message using grammar and lexical tables to produce a parse table. The parse table is compared to data needed in a semantics table to fire a rule. The firing of a rule causes a function table to be evaluated. The function table includes function calls which can perform user desired functions. Among the functions is a generate function which will take the contents of a table and turn it into a message and route the message to a destination where the destination can be a table, process or device. Plural interpreters can be created where each interpreter includes a workspace containing the above-mentioned tables. Each interpreter can perform a different task such as recognizing the meaning of a message in one language and performing some action such as sending out a message in a different language or updating a database. The present invention is particularly suitable for managing a machining workcell including machines from different vendors.

ABSTRACT

...in one language and performing some action such as sending out a message in a different language or updating a database. The present invention is particularly suitable for managing a machining workcell including machines from different...

... both items of the source and target are known then the actual item values and attributes can be updated (Copy sub -- Item sub -- To sub -- Item) by using the pointer to the source to retrieve...

1/2,AB,KWIC/17 (Item 2 from file: 653)
DIALOG(R)File 653:US Pat.Fulltext
(c) format only 2000 The Dialog Corp. All rts. reserv.

01644632

Utility
COMPUTER INTEGRATION SYSTEM

PATENT NO.: 4,714,995
ISSUED: December 22, 1987 (19871222)
INVENTOR(s): Materna, Anthony T., Santa Monica, CA (California), US (United States of America)
Vossler, Roger A., Santa Monica, CA (California), US (United States of America)
Stepczyk, Frank M., Manhattan Beach, CA (California), US (United States of America)
ASSIGNEE(s): TRW Inc , (A U.S. Company or Corporation), Redondo Beach, CA (California), US (United States of America)
[Assignee Code(s): 85976]
APPL. NO.: 6-775,927
FILED: September 13, 1985 (19850913)
U.S. CLASS: 707-201 cross ref: 364-DIG.001
INTL CLASS: [4] G06F 15-16
FIELD OF SEARCH: 364-200MSFILE

References Cited

U.S. PATENT DOCUMENTS

4,604,686 8/1986 Reiter et al. 364-200

PRIMARY EXAMINER: Zache, Raulfe B.
ATTORNEY, AGENT, OR FIRM: Heal, Noel F.; Goldstein, Sol L.
CLAIMS: 11
EXEMPLARY CLAIM: 1
DRAWING PAGES: 3
DRAWING FIGURES: 7
ART UNIT: 232
FULL TEXT: 672 lines

ABSTRACT

Apparatus for integrating independent computer systems with associated heterogeneous data bases having some common or shared data entities. The apparatus includes an update capturing module installed at each of the computer systems, for capturing update transactions involving shared data entities, and a central data translator, which receives the updates from the update capturing modules, translates the updates into appropriate record formats and data base schemas, and transmits the translated replicas to the appropriate separate computer systems, where the updates are directly or indirectly entered into the corresponding data bases, thereby ensuring consistency among the separate but related data bases.

ABSTRACT

Apparatus for integrating independent computer systems with associated heterogeneous data bases having some common or shared data entities. The apparatus includes an update capturing module installed...
... data. More particularly, the invention relates to the integration of multiple computer systems that have heterogeneous data bases ; that is to say, each computer system has a data base that is, in general, different from the others in form and structure, although not necessarily different in content. Integrating the... also a trend in computer architecture toward distributed systems, in which hardware processors and associated data bases are situated at different physical locations, but still operate to some degree as a single system. This trend suggests...

17, the authors discuss a distributed data base system in which duplicate copies of a data base are maintained in different locations. Updates made to a data base in one location are transmitted to the other...which there is a need to communicate between the multiple computers. However, the subject of heterogeneous data bases is not raised, and the data bases are apparently designed to be completely compatible with...by North Holland Publishing Company, 1982, pp. 153-84. Multibase permits a user to access different data bases by employing a single data base schema and a single query language. Multibase performs all...problem of integrating large numbers of microcomputers to provide inquiry access to a number of heterogeneous data bases. In many situations, it is desirable to provide microcomputers access to different data bases for read-only or inquiry purposes. Until now, the heterogeneous nature of the data bases has made it very difficult to integrate microcomputers with larger mainframe computers except in relatively...

... that there is still a need for a technique for integrating multiple computer systems having heterogeneous data bases. Ideally, the heterogeneous data bases should be promptly updated to maintain consistency of the common or shared data, and should...ideally be adaptable to integrate microcomputers with read-only capability into a larger system of heterogeneous data bases. The present invention is directed to these ends.

SUMMARY OF THE INVENTION

The present invention is a system for integrating a number of different host computers with heterogeneous data bases, by controlled replication of common data, to ensure that identical data items in the data... computer systems. In particular, the invention provides a technique for conveniently sharing data among multiple heterogeneous data bases, by translating and distributing updates of the shared data. Other aspects and advantages of the...

...EMBODIMENT

The present invention is a system for integrating a number of host computers having heterogeneous data bases so that any identical data items in the data bases are maintained consistent with each...

... they have different organizational schema or structures and different record formats for storing data.

The different data bases are partially duplicative or redundant in that the same data item may be included in...

...more data bases are referred to as "duplicate data" or "common data".

Integration of these different data bases, which is the principle object of this invention, means ensuring that data items which are...local data base will have certain data items in common with one of the other data bases and different data items in common with another of the data bases.

In the apparatus of the...attribute has not been correctly updated. The alternative approach is to transmit both a data attribute identifier and a copy of the updated data attribute as well. The host computer system then not only retrieves...invention represents a significant advance in the

field of integration of independent computer systems having heterogeneous data bases . In particular, the invention achieves integration of distributed heterogeneous data bases by making translated replicas of data base updates, and distributing the replicas to other data...

... In a system for integrating a plurality of host computer systems having separate and local data bases having different organization and record formats with at least some items of data being included in more...

... and integrating system for ensuring that the values of the shared data items in the different local data bases are maintained consistent with each other, the integrating system comprising:
data translator means for translating...

1/2,AB,KWIC/18 (Item 3 from file: 653)
DIALOG(R)File 653:US Pat.Fulltext
(c) format only 2000 The Dialog Corp. All rts. reserv.

01487990

Utility

MAN MACHINE INTERFACE

PATENT NO.: 4,570,217

ISSUED: February 11, 1986 (19860211)

INVENTOR(s): Allen, Bruce S., Willow St., East Kingston, NH (New Hampshire)
, US (United States of America), 03827
Dunalvey, Michael R., 276 Harris Ave., Needham, MA
(Massachusetts), US (United States of America), 02192
King, Bruce A., R.F.D. 2, Bolton, MA (Massachusetts), US
(United States of America), 01740
DuPrie, Harold J., 57 High St., Apt. 1B, Andover, MA
(Massachusetts), US (United States of America), 01810
Hudnall, Richard E., 15 Juniper La., Nashua, NH (New
Hampshire), US (United States of America), 03063
Lapidus, Stanely N., 44 Elk Dr., Bedford, NH (New Hampshire),
US (United States of America), 03102
Gilbert, Daniel R., 103 Horseshoe Rd., Dracut, MA
(Massachusetts), US (United States of America), 01826
Carlson, Anne M., 31 Avon St., Wakefield, MA (Massachusetts),
US (United States of America), 01880
Thakrar, Kiran, 13 Tiffany Rd., Apt. 7 King's Ct., Salem, NH
(New Hampshire), US (United States of America), 03079
Doig, Robert C., 9 Lancelot Ct., Apt. 12, Salem, NH (New
Hampshire), US (United States of America), 03079
Kimerer, Brian S., 66 John Carver Rd., Reading, MA
(Massachusetts), US (United States of America), 01867
Sirois, Andrew F., 20 Easton St., Lawrence, MA
(Massachusetts), US (United States of America), 01843
Poirer, Bruce A., 5 Balgreen Ct., Bradford, MA
(Massachusetts), US (United States of America), 01830
Hunt, Philip G., 3 Silvestri Cir., Apt. 17, Derry, NH (New
Hampshire), US (United States of America), 03038
Dziesanowski, Joseph J., 59 Strahmore Rd., Brighton, MA
(Massachusetts), US (United States of America), 02146
Bromberg, Michael A., 12D Hampshire Dr., Nashua, NH (New
Hampshire), US (United States of America), 03063
Brown, Michael, 1 Lancelot Ct., Apt. #16, Salem, NH (New

Hampshire), US (United States of America), 03079
Friedel, Seymour A., Bean Rd., Merrimack, NH (New Hampshire),
US (United States of America), 03054
[Assignee Code(s): 68000]

EXTRA INFO: Assignment transaction [Reassigned], recorded May 25,
1989 (19890525)
Assignment transaction [Reassigned], recorded January 3,
1994 (19940103)
Assignment transaction [Reassigned], recorded February 18,
1994 (19940218)
Assignment transaction [Reassigned], recorded August 14,
1995 (19950814)
Assignment transaction [Reassigned], recorded December 22,
1997 (19971222)

APPL. NO.: 6-479,191

FILED: March 28, 1983 (19830328)

The present application is a continuation-in-part application of U.S.
patent application Ser. No. 363,404, filed Mar. 29, 1982 for MAN-MACHINE
INTERFACE, now abandoned, in favor of the present application.

U.S. CLASS: 364-188 cross ref: 364-DIG.002; 364-191; 364-921.4; 364-921.8;
364-921.9; 364-926; 364-926.9; 364-926.92; 364-927.3;
364-927.4; 364-928; 364-929.2; 364-929.3; 364-935; 364-935.2;
364-935.4; 364-935.41; 364-940.61; 364-940.62; 364-941;
364-949; 364-949.3; 364-959.1; 364-968; 364-969; 364-969.1;
364-977

INTL CLASS: [4] G06F 15-46; G06F 3-153

FIELD OF SEARCH: 364-188; 364-189; 364-171; 364-170; 364-169; 364-168;
364-167; 364-193; 364-192; 364-191; 364-200; 364-900; 340-704;
340-703; 340-702; 340-701; 340-706; 340-707; 340-711; 340-712;
340-720; 340-721; 340-722

References Cited

U.S. PATENT DOCUMENTS

3,971,000	7/1976	Cromwell	364-189
4,001,807	1/1977	Dallimonti	364-189
4,303,973	12/1981	Williamson, Jr. et al.	364-189
4,413,314	11/1983	Slater et al.	364-188
4,443,861	4/1984	Slater	364-189

PRIMARY EXAMINER: Ruggiero, Joseph

ATTORNEY, AGENT, OR FIRM: Ware, Robert H.; Stoltz, Melvin I.; Fressola,
Alfred A.

CLAIMS: 43
EXEMPLARY CLAIM: 35
DRAWING PAGES: 105
DRAWING FIGURES: 119
ART UNIT: 236
FULL TEXT: 19655 lines

ABSTRACT

A man-machine interface for use with industrial processes is disclosed

having the capability of design and configuration of the interrelationship of components forming an overall industrial process. The man-machine interface further provides operator use, including process monitoring and control, as well as alarm annunciation. Most user interaction with the man-machine interface is performed through a color CRT monitor having a touch panel on the surface of the CRT screen. Operator use may be limited to touch panel interaction while configurer and designer use normally further includes use of a keyboard.

The man-machine interface utilizes distributed processing and incorporates a high level graphic language. The graphic language facilitates real time graphic display implementation through use of dynamic and static variables. Variable types are dynamically associated with variable values so that variables can undergo type changes without detrimental effect. Video bit bangers and shifters further enhance the versatility and ease of implementing rapid modifications of graphic displays. The man-machine interface further incorporates a new bus structure including a new bus arbitration technique, a unidirectional memory boundary protection mechanism, an improved interrupt system, and an improved watchdog timer circuit.

... the configurator mode, the subpicture configuration options menu is presented. It is presented in a different background token color than that of the designer options menu.

Touching the select mode button...subpicture design options menu presents the following buttons:

- (1) create subpicture
- (2) delete subpicture
- (3) copy subpicture
- (4) list subpicture
- (5) edit subpicture
- (6) help
- (7) select mode

(8) select object... acquisition package and otherwise returns the value False.

The function valid, when applied to a database variable, returns the value True when a display has previously validated the variable's value...

1/2,AB,KWIC/19 (Item 1 from file: 654)
DIALOG(R)File 654:US Pat.Full.
(c) format only 2000 The Dialog Corp. All rts. reserv.

03189550

Utility

SPECTRALLY COORDINATED PATTERN SEARCH-IMAGING SYSTEM AND METHOD

PATENT NO.: 6,122,391

ISSUED: September 19, 2000 (20000919)

INVENTOR(s): Ringland, William K., Walnut, CA (California), US (United States of America)

Kubo, Jon C., Walnut, CA (California), US (United States of America)

ASSIGNEE(s): Autodesk, Inc , (A U.S. Company or Corporation), San Rafael, CA (California), US (United States of America)

APPL. NO.: 8-966,299
FILED: November 07, 1997 (19971107)

This application is a continuation of Ser. No. 08-292,514 filed Aug. 18, 1994 now U.S. Pat. No. 5,751,829.

U.S. CLASS: 382-100 cross ref: 28-109; 355-81
INTL CLASS: [7] G06K 9-00
FIELD OF SEARCH: 382-100; 382-162; 382-305; 382-165; 382-191; 382-190;
382-189; 382-209; 395-103; 364-189; 364-191; 358-518; 703-3;
703-2; 703-1; 703-902; 355-84; 355-83; 355-82; 355-81; 355-80;
355-79; 355-78; 355-88; 28-109

References Cited

U.S. PATENT DOCUMENTS

4,046,476	9/1977	Charamella et al.	355-77
4,181,954	1/1980	Rosenthal et al.	395-103
4,931,929	6/1990	Sherman	364-401
5,222,154	6/1993	Graham et al.	382-162
5,241,671	8/1993	Reed et al.	395-600
5,369,763	11/1994	Biles	707-3
5,414,537	5/1995	Omuro et al.	358-518
5,458,590	10/1995	Schleinz et al.	664-361
5,465,291	11/1995	Barrus et al.	379-67.1
5,493,518	2/1996	Maes et al.	395-121
5,495,568	2/1996	Beavin	395-173
5,495,576	2/1996	Ritchey	395-125
5,524,195	6/1996	Clanton, III et al.	395-173
5,563,988	10/1996	Maes et al.	395-121
5,572,635	11/1996	Takizawa et al.	382-167
5,577,175	11/1996	Naka et al.	395-173

NON-U.S. PATENT DOCUMENTS

2 105 075 3/1983 GB (United Kingdom)

OTHER REFERENCES

Article--ColorTec-PCM (Personal Color Meter) of ColorTec Associates, Inc.

Cavanaugh, R.T., "Educational/Institutional Features of the Optical Videodisc System", SMPTE Journal, vol. 86, No. 4, Apr. 1977, pp. 201-203.

Riggs, L., "Direct Marketing Goes Electronic", Sales & Marketing Mgmt., vol. 134, No. 1, Jan. 14, 1985, pp. 59-60.

Hoke, P., "Comp-U-Store System Could Change Retail Economics", Direct Marketing, vol. 46, No. 3, Jul. 1983, pp. 101-107.

Gatty, B., "Setting up Shop on Computer Screens", Nation's Business, vol. 72, No., 3, Mar. 1984, pp. 57-58.

"Retailers Beginning to Tune in Video Displays", Advertising Age, Nov. 18, 1985 pp. 66.

"Videodisc: Product Search Launched for Architects and Interior Designers", Videodisc and Optical Disk, vol. 5, No. 4, Jul./Aug. 1985, pp. 244-247.

Merrian, M. Suzanne, et al., "An Interactive Videodisc for Visitor Information", published by Learned Information, Inc., Medford, New Jersey, 1984, pp. 195-207.

PRIMARY EXAMINER: Chang, Jon
ASST. EXAMINER: Patel, Jayanti K.
ATTORNEY, AGENT, OR FIRM: Gates & Cooper
CLAIMS: 18
EXEMPLARY CLAIM: 1
DRAWING PAGES: 12
DRAWING FIGURES: 12
ART UNIT: 273
FULL TEXT: 1336 lines

ABSTRACT

A system for selecting decorative materials is based on large numbers of high-resolution, full color images of decorative materials stored in a compressed format on an inexpensive medium such as a CD-ROM. In creating the ROM, each image is coordinated with additional information such as style of pattern, type of material, and other auxiliary information. Before final compression and storage of the image data color information is added by spectrophotometrically analyzing the decorative material. Color values for a background color and up to four foreground colors are determined. Individual colors are then referenced to a comprehensive color standard system containing a large number of standardized color swatches. Spectrophotometric color referencing allows the data records to be rapidly searched on the basis of color, as well as the other information in the record. Wallpaper patterns, drapery material, floor covering, or paint can then be rapidly selected on the basis of matching color. Various patterns and paints can be compared side by side on a high-resolution computer monitor that has been calibrated to produce an accurate color image. Finally, the chosen paints and other decorating materials can be rendered onto a room image so that the consumer can view an accurate simulation of the chosen materials.

... reference system, virtually any color can be matched. Then any person with access to a copy of the reference system can look up a given swatch number and see how the...

... is a good choice for use with the present invention. The Pantone system has 1701 different swatches in a set, thus allowing virtually any color to be matched.

Most decorative materials have a single background color combined with several different foreground colors to define the material's pattern. In the present invention, the background color...

1/2,AB,KWIC/20 (Item 2 from file: 654)
DIALOG(R) File 654:US Pat.Full.
(c) format only 2000 The Dialog Corp. All rts. reserv.

03152926

Utility

COMPUTER-BASED COMMUNICATION SYSTEM AND METHOD USING METADATA DEFINING A CONTROL-STRUCTURE

PATENT NO.: 6,088,717

ISSUED: July 11, 2000 (20000711)

INVENTOR(s): Reed, Drummond Shattuck, Seattle, WA (Washington), US (United States of America)
Heymann, Peter Earnshaw, Seattle, WA (Washington), US (United States of America)
Mushero, Steven Mark, Seattle, WA (Washington), US (United States of America)
Jones, Kevin Benard, Seattle, WA (Washington), US (United States of America)
Oberlander, Jeffrey Todd, Seattle, WA (Washington), US (United States of America)

ASSIGNEE(s): OneName Corporation, (A U.S. Company or Corporation), Seattle, WA (Washington), US (United States of America)

APPL. NO.: 9-143,888

FILED: August 31, 1998 (19980831)

This application is a continuation of application Ser. No. 08-722,314, filed Sep. 27, 1996 (allowed) now U.S. Pat. No. 5,862,325 which is a continuation-in-part of application Ser. No. 08-609,115, filed Feb. 29, 1996 (pending).

U.S. CLASS: 709-201 cross ref: 707-10; 707-104; 707-203; 707-204; 709-212; 709-227; 709-229; 709-242; 709-244

INTL CLASS: [7] G06F 15-16

FIELD OF SEARCH: 709-203; 709-202; 709-201; 709-200; 709-212; 709-219; 709-218; 709-217; 709-216; 709-229; 709-228; 709-227; 709-232; 709-244; 709-243; 709-242; 707-1; 707-10; 707-9; 707-104; 707-103; 707-102; 707-101; 707-100; 707-204; 707-203; 707-202; 707-201; 707-200

References Cited

U.S. PATENT DOCUMENTS

4,274,139	6/1981	Hodgkinson et al.	709-203
4,432,057	2/1984	Daniell et al.	707-8
4,558,413	12/1985	Schmidt et al.	707-203
4,604,686	8/1986	Reiter et al.	395-500.46
4,714,992	12/1987	Gladney et al.	707-206
4,714,995	12/1987	Materna et al.	707-201
4,745,559	5/1988	Willis et al.	705-37
4,746,559	5/1988	Nishikawa	428-142
4,815,030	3/1989	Cross et al.	707-10
4,974,149	11/1990	Valenti	709-217
5,008,814	4/1991	Mathur	709-221
5,008,853	4/1991	Bly et al.	345-331
5,019,963	5/1991	Alderson et al.	707-201
5,133,075	7/1992	Risch	707-201
5,155,847	10/1992	Kirouac et al.	709-221
5,187,787	2/1993	Skeen et al.	709-300
5,220,657	6/1993	Bly et al.	711-152

5,226,161	7/1993	Khoyi et al.	709-303
5,257,369	10/1993	Skeen et al.	709-229
5,287,504	2/1994	Carpenter et al.	707-201
5,303,379	4/1994	Khoyi et al.	395-700
5,359,730	10/1994	Marron	709-100
5,404,488	4/1995	Kerrigan et al.	711-133
5,426,747	6/1995	Weinreb et al.	711-203
5,440,744	8/1995	Jacobson et al.	709-203
5,452,447	9/1995	Nelson et al.	707-205
5,473,772	12/1995	Halliwel et al.	709-220
5,485,370	1/1996	Moss et al.	709-217
5,491,820	2/1996	Belove et al.	707-3
5,495,610	2/1996	Shing et al.	709-221
5,497,491	3/1996	Mitchell et al.	704-303
5,499,343	3/1996	Pettus	709-203
5,515,508	5/1996	Pettus et al.	709-203
5,519,769	5/1996	Weinberger et al.	379-112
5,519,875	5/1996	Yokoyama et al.	707-5
5,528,490	6/1996	Hill	705-25
5,548,726	8/1996	Pettus	709-221
5,555,427	9/1996	Aoe et al.	709-201
5,557,793	9/1996	Koerber	709-303
5,560,012	9/1996	Ryu et al.	395-101
5,564,051	10/1996	Halliwel et al.	707-200
5,566,302	10/1996	Khalidi et al.	709-201
5,577,244	11/1996	Killebrew et al.	395-703
5,581,755	12/1996	Koerber et al.	707-103
5,581,761	12/1996	Radia et al.	395-702
5,581,764	12/1996	Fitzgerald et al.	395-703
5,586,311	12/1996	Davies et al.	707-1
5,586,326	12/1996	Ryu et al.	395-701
5,596,720	1/1997	Hamada et al.	709-206
5,596,746	1/1997	Shen et al.	707-101
5,600,834	2/1997	Howard	707-201
5,608,874	3/1997	Ogawa et al.	709-346
5,615,112	3/1997	Liu Sheng et al.	707-104
5,619,710	4/1997	Travis, Jr. et al.	709-203
5,623,656	4/1997	Lyons	709-203
5,623,661	4/1997	Hon	707-1
5,625,818	4/1997	Zarmer et al.	707-104
5,628,005	5/1997	Hurvig	707-8
5,630,092	5/1997	Carreiro et al.	711-111
5,630,116	5/1997	Takaya et al.	707-201
5,634,010	5/1997	Ciscon et al.	709-203
5,640,564	6/1997	Hamilton et al.	709-303
5,644,710	7/1997	Johnson et al.	713-200
5,644,764	7/1997	Johnson et al.	707-103
5,649,192	7/1997	Stucky	707-103
5,652,887	7/1997	Dewey et al.	709-303
5,668,997	9/1997	Lynch-Freshner et al.	709-303
5,673,322	9/1997	Pepe et al.	380-49
5,682,532	10/1997	Remington et al.	709-303
5,684,984	11/1997	Jones et al.	707-10
5,684,991	11/1997	Malcolm	707-204
5,689,708	11/1997	Regnier et al.	709-302
5,706,434	1/1998	Kremen et al.	709-218
5,710,918	1/1998	Lagarde et al.	707-10

5,721,911	2/1998	Ha et al.	707-100
5,761,677	6/1998	Senator et al.	707-203
5,761,678	6/1998	Bendert et al.	707-204

OTHER REFERENCES

C. Bowman, P. Danzig, D. Hardy, U. Manber, M. Schwartz & D. Wessels "Harvest: A Scalable, Customizable Discovery and Access System" Mar. 12, 1995.

D. Hardy & M. Schwartz "Customized Information Extraction as a Basis for Resource Discovery" Mar., 1994.

William G. Camargo "The Harvest Broker", Dec., 1994.

D. Bulterman, G. van Rossum and R. van Liere "A Structure for Transportable, Dynamic Multimedia Documents" USENIX, Summer '91 Nashville, TN.

G. Almes and C. Holman "Edmas: An Object-Oriented, Locally Distributed Mail System" IEEE Transactions on Software Engineering, Sep., 1987.

G. Almes, A. Black, C. Bunje and D. Wiebe "Edmas: A Locally Distributed Mail System" IEEE, 1984.

W. Bender, H. Lie, J. Orwant, L. Teodosio, & N. Abramson "Newspace: Mass Media and Personal Computing", USENIX--Summer '91--Nashville, TN.

R. Thomas, H. Forsdick, T. Crowley, R. Schaaf, R. Tomlinson & V. Travers "Diamond: A Multimedia Message System Built on a Distributed Architecture" IEEE, Dec. 1985.

S. Ramanathan & P. V. Rangan "Architectures for Personalized Multimedia" IEEE, 1994.

N. Yankelovich, B. Haan, N. Mevrowitz & S. Drucker "Intermedia: The Concept and the Construction of a Seamless Information Environment" IEEE, Jan. 1988.

D. Woekl, W. Kim & W. Luther "An Object-Oriented Approach to Multimedia Databases" ACM 1986.

N. Borenstein, C. Everhart, J. Rosenberg, A. Stoller "A Multi-media Message System for Andrew" USENIX Winter Conference Feb., 1988.

S. Jackson & N. Yankelovich "InterMail: A Prototype Hypermedia Mail System" Hypertext 91 Proceedings Dec. 1991.

E. Hoffert & G. Gretsches "The Digital News System at Educom: A Convergence of Interactive Computing, Newspapers, Television and High Speed Networks" Communications of the ACM Apr. 1991.

D. Crocker, E. Szurkowski & D. Farber "An Internetwork Memo Distribution Capability--MMDF" IEEE ACM 1979.

Douglas Engelbart "Authorship Provisions in Augment" IEEE, 1984.

J.J. Garcia-Luna-Aceves "Towards Computer-Based Multimedia Information Systems" Computer Message Systems 85, 1986.

Debra P. Deutsch "Implementing Distribution Lists in Computer-Based Message Systems" Computer-Based Message Services, IFIP, 1984.

T. Purdy, D. Thorslund & N. Witchlow "Meridian SL Messaging" Computer Message Systems--85 IFIP, 1986.

Michael Tschichholz "Message Handling System: Requirements to the User Agent" Computer Message Systems--85, IFIP, 1986.

Lothar Wosnitza "Group Communication in the MHS Context" Computer Message Systems 85 IFIP, 1986.

Jacob Palme "Distribution Agents (mailing lists) in Message Handling Systems" Computer Message Systems 85 IFIP, 1986.

Teresa F. Lunt "A Model for Message System Security" Computer Message Systems 85 IFIP, 1986.

A. Roger Kave "A User Agent for Multiple Computer-Based Message Services" Computer-Based Message Services, IFIP 1984.

Paul Wilson "Structures for Mailbox System Applications" Computer-Based Message Services, IFIP 1984.

J. Postel, G. Finn, A. Katz & J. Reynolds "The ISI Experimental Multimedia Mail System" Information Sciences Institute, Sep. 1986.

E. Moeller, A. Scheller & G. Schurmann "Distributed Processing of Multimedia Information" IEEE Computer Society Proceedings May 28-Jun. 1, 1990.

Richard L. Phillips "An Interpersonal Multimedia Visualization System" IEEE Computer Graphics & Applications IEEE 1991.

Jacob Palme "You Have 134 Unread Mail! Do You Want to Read Them Now?" Computer-Based Message Services IFIP, 1984.

Michael Caplinger "An Information System Based on Distributed Objects" OOPSLA '87 Proceedings.

M. Papa, G. Ragucci, G. Corrente, M. Ferrise, S. Giurleo and D. Vitale "The Development of an Object-Oriented Multimedia Information System" Lecture Notes in Computer Science, Sep., 1994.

Silvano Maffeis "A Flexible System Design to Support Object-Groups and Object-Oriented Distributed Programming" Lecture Notes in Computer Science, Jul. 1993.

R. Gotze, H. Eirund & R. Claa beta en "Object-Oriented Dialog Control for Multimedia User Interfaces" Lecture Notes in Computer Science--Human Computer Interaction Sep. 1993.

Chris Maeda "A Metaobject Protocol for Controlling File Cache Management" Lecture Notes in Computer Science, Mar., 1996.

A. Joseph, A. deLespinasse, J. Tauber, D. Gifford & M. Kaashoek "Rover A Toolkit for Mobile Information Access" SIGOPS '95 1995 ACM.

Wolfgang Lux "Adaptable Object Migration: Concept and Implementation" Operating Systems Review Apr., 1995.

R. Campbell, N. Islam, R. Johnson, P. Kougiouris & P. Madany "Choices, Frameworks and Refinement" Department of Computer Science, University of Illinois, Dec. 1991.

Klemens Bohm & Thomas C. Rakow "Metadata for Multimedia Documents" SIGMOD Record, vol. 23, No. 4, Dec. 1994.

Simon Gibbs "Composite Multimedia and Active Objects" OOPSLA '91.

T. Purdin, R. Schlichting & G. Andrews "A File Replication Facility for Berkeley Unix" Software Practice and Experience, vol. 17, Dec. 1987.

A. Black, N. Hutchinson, E. Jul & H. Levy "Object Structure in the Emerald System" OOPSLA '86 Proceedings.

Daniel T. Chang "Coral: A Concurrent Object-Oriented System for Constructing and Executing Sequential, Parallel and Distributed Applications" OOPS Messenger, Apr. 1991.

A. Birrell, G. Nelson, S. Owicki & E. Wobber "Network Objects" Proceedings of the 14th ACM Symposium on Operating Systems Principles, Dec. 5-8, 1993.

Jacques Ferber "Computational Reflection in Class based Object Oriented Languages" OOPSLA '89 Proceedings.

C. Fung & M. Pong "MOCS: an Object-Oriented Programming Model for Multimedia Object Communication and Synchronization" 1994 IEEE.

T. Hase & M. Matsuda "A New Audio-Visual Control Using Message Object Transmission", 1994 IEEE, Nov., 1994.

F. Horn & J. Stefani "On Programming and Supporting Multimedia Object Synchronization" The Computer Journal, vol. 36, No. 1, 1993.

T. Little & A. Ghafoor Spatio-Temporal Composition of Distributed Multimedia Objects for Value-Added Networks, IEEE 1991.

M. Vazirgiannis & C. Mourlas "An Object-Oriented Model for Interactive Multimedia Presentations" The Computer Journal, vol. 36, No. 1, 1993.

T. Little & A. Ghafoor "Synchronization and Storage Models for Multimedia Objects" 1990 IEEE Apr. 1990.

Cosmos Nicolaou "An Architecture for Real-Time Multimedia Communication Systems", 1990 IEEE, Apr., 1990.

Ralf Steinmetz "Synchronization Properties in Multimedia Systems" 1990 IEEE, Apr. 1990.

T. Little & A. Ghafoor "Network Considerations for Distributed Multimedia Object Composition and Communication" 1990 IEEE Network Magazine, Nov., 1990.

K. Smith and S. Zdonik "Intermedia: A Case Study of the Differences Between Relational and Object-Oriented Database Systems" OOPSLA '87 Proceedings.

S. Ramanathan & P. Rangan "Architectures for Personalized Multimedia" 1994 IEEE.

Marvin Sirbu and J.D. Tygar, "Netbill: An Internet Commerce system Optimized For Network-Delivered Services", IEEE Personal Communications Magazine, p. 34-39, Aug. 1995.

Henrik Eriksson, "Expert System As Knowledge Servers", IEEE Expert Magazine, p. 14-19, Jun. 1996.

Budi Yuwono and Dik Lun Lee, "Wise: A World Wide Web Resource Database System", IEEE Transactions on Knowledge and Data Engineering, vol. 8, No. 4, Aug. 1996.

H. Penny Nii "Blackboard Systems" The AI Magazine, Summer, 1986.

AppleShare, Apr. 1995.

"Manual Page for Unix NFS Mount Command" No Date.

"Manual Page for Unix FSTAB Command" No Date.

Phil Lapsley and Brian Kantor "Network News Transfer Protocol", Feb. 1986.

Brain Kantor and Phil Lapsley, Network News Transfer Protocol, "A Proposed Standard for the Stream-Based Transmission of News", Feb. 1986.

M. Crispin "Network Working Group", University of Washington, Dec., 1996.

Terry Gray Comparing Two Approaches to Remote Mailbox Access: IMAP vs. POP, University of Washington No Date.

Terry Gray "Message Access Paradigms and Protocols", University of Washington, Aug. 1995.

PRIMARY EXAMINER: Matar, Ahmad F.

ASST. EXAMINER: Barot, Bharat

ATTORNEY, AGENT, OR FIRM: Wolf, Greenfield & Sacks, P.C.

CLAIMS: 99

EXEMPLARY CLAIM: 1

DRAWING PAGES: 47

DRAWING FIGURES: 58

ART UNIT: 278

FULL TEXT: 8517 lines

ABSTRACT

An automated communications system operates to transfer data, metadata and methods from a provider computer to a consumer computer through a communications network. The transferred information controls the communications relationship, including responses by the consumer computer,

updating of information, and processes for future communications. Information which changes in the provider computer is automatically updated in the consumer computer through the communications system in order to maintain continuity of the relationship. Transfer of metadata and methods permits intelligent processing of information by the consumer computer and combined control by the provider and consumer of the types and content of information subsequently transferred. Object oriented processing is used for storage and transfer of information. The use of metadata and methods further allows for automating many of the actions underlying the communications, including communication acknowledgements and archiving of information. Service objects and partner servers provide specialized data, metadata, and methods to providers and consumers to automate many common communications services and transactions useful to both providers and consumers. A combination of the provider and consumer programs and databases allows for additional functionality, including coordination of multiple users for a single database.

...scheduled event loop of the consumer or provider program.

FIG. 17 Illustrates the object oriented database structures for different communications object types.

FIG. 18 illustrates object oriented data structures used for distribution control.

FIG...

... information contained in the provider database can be transferred and used in communications relationships with different consumers. The provider database includes information associating the information with each potential recipient. The association information is used to...

... to the existing information to determine what has been updated. The consumer program maintains a database of information from different providers. When updated information is received, the consumer program executes instructions associated with the information...

... an association with methods 141 in order to allow different methods to be assigned to different recipients. An example is the communications object's update method. Communications objects transmitted to consumers... all communications object instances 110 have been transmitted, the program does another query of the database for ...of the type definition 144 for each required or desired attribute to automatically identify and copy these attributes from elements 143 in the provider database 11 to elements 143 in the directory partner...

1/2,AB,KWIC/21 (Item 3 from file: 654)
DIALOG(R) File 654:US Pat.Full.
(c) format only 2000 The Dialog Corp. All rts. reserv.

03129156

Utility
DYNAMIC ORGANIZATION MODEL AND MANAGEMENT COMPUTING SYSTEM AND METHOD THEREFOR

PATENT NO.: 6,067,548
ISSUED: May 23, 2000 (20000523)
INVENTOR(s): Cheng, Edward C., South San Francisco, CA (California), US

(United States of America)
ASSIGNEE(s): e Guanxi, Inc , (A U.S. Company or Corporation), San Mateo, CA
(California), US (United States of America)
APPL. NO.: 9-116,521
FILED: July 16, 1998 (19980716)
U.S. CLASS: 707-103 cross ref: 707-101; 707-104
INTL CLASS: [7] G06F 17-30
FIELD OF SEARCH: 707-104; 707-101; 707-103

References Cited

		U.S. PATENT DOCUMENTS	
5,204,958	4/1993	Cheng et al.	707-102
5,329,626	7/1994	Klein et al.	709-248
5,864,862	1/1999	Kriens et al.	707-103

PRIMARY EXAMINER: Black, Thomas G.
ASST. EXAMINER: Rones, Charles L.
ATTORNEY, AGENT, OR FIRM: Gens, Timothy H.
CLAIMS: 30
EXEMPLARY CLAIM: 1
DRAWING PAGES: 8
DRAWING FIGURES: 11
ART UNIT: 271
FULL TEXT: 1138 lines

ABSTRACT

The present invention provides a dynamic organizational database as an underlying information system to support collaborative computing in a global enterprise. This information system is built based on the Organizational Modeling and Management model (OMM) and provides a system architecture and a graphical user interface for easy manipulation of organizational objects. Contrary to traditional approaches, the present invention separates the organization model from the process model, the application model and the data model. Thus, independent and flexible enterprise modeling and design is allowed to reflect more realistically a rapidly changing business environment.

...together or to further divide their organizations.

The present invention can utilize any type of database schema. The different vertical and horizontal partitions of the enterprise correspond naturally to database tables. It is typical...s information is archived, but is still retrievable. The fact that the present invention provides different stages gives the database the opportunity to handle the information differently than in the prior art. As the dataOrganization create, delete show, merge

Member create, delete, copy
get, set, move
Attribute create, delete,
show
(dis)associate

Attribute Value
none get, set
Virtual Link create, delete resolve...

1/2,AB,KWIC/22 (Item 4 from file: 654)
DIALOG(R)File 654:US Pat.Full.
(c) format only 2000 The Dialog Corp. All rts. reserv.

03071281

Utility

METHOD AND SYSTEM FOR DATABASE APPLICATION SOFTWARE CREATION REQUIRING
MINIMAL PROGRAMMING

PATENT NO.: 6,016,394
ISSUED: January 18, 2000 (20000118)
INVENTOR(s): Walker, Jeffrey L., Ross, CA (California), US (United States
of America)
ASSIGNEE(s): TenFold Corporation, (A U.S. Company or Corporation), Draper,
UT (Utah), US (United States of America)
APPL. NO.: 8-932,255
FILED: September 17, 1997 (19970917)
U.S. CLASS: 395-701
INTL CLASS: [6] G06F 9-445
FIELD OF SEARCH: 395-701; 707-103; 364-282.1; 345-356; 345-334

References Cited

		U.S. PATENT DOCUMENTS	
4,528,644	7/1985	Soderberg	705-410
4,827,404	5/1989	Barstow et al.	364-200
4,831,526	5/1989	Luchs et al.	364-401
4,949,253	8/1990	Chigira et al.	364-200
5,038,296	8/1991	Sano	364-513
5,353,401	10/1994	Iizawa et al.	345-335
5,381,534	1/1995	Shi	395-200
5,381,548	1/1995	Matsuo	395-700
5,423,041	6/1995	Burke et al.	395-700
5,437,027	7/1995	Bannon et al.	707-103
5,485,601	1/1996	Ching	395-500
5,485,610	1/1996	Gioielli et al.	395-600
5,495,567	2/1996	Iizawa et al.	345-334
5,504,885	4/1996	Alashgur	395-600
5,566,330	10/1996	Sheffield	707-4
5,586,314	12/1996	Hill et al.	395-604
5,615,379	3/1997	Wehle	395-701
5,819,090	10/1998	Wolf et al.	709-302
5,819,251	10/1998	Kremer et al.	707-1
5,830,065	11/1998	Sitrick	463-31

OTHER REFERENCES

Title: Surfing the Web gets new smarts--Neural-learning and fuzzy-logic
tools add intelligence to Internet advertising, Author: Johnson, Colin R,
source: Electronic Engineering Times, dated: Jan. 5th, 1998.

Efficient and Language-Independent Mobile Program, Author: Adl-Tabatabai,
ACM, May 1996.

PRIMARY EXAMINER: Hafiz, Tariq R.
ASST. EXAMINER: Das, Chameli Chaudhuri
ATTORNEY, AGENT, OR FIRM: Kirton & McConkie Krieger, Michael F.
CLAIMS: 27
EXEMPLARY CLAIM: 1
DRAWING PAGES: 11
DRAWING FIGURES: 11
ART UNIT: 272
FULL TEXT: 1722 lines

ABSTRACT

A system and method for computer-assisted database management software creation of a target software application from a description known as a dictionary interoperating with a universal software application. The dictionary contents customize the universal application into the target software application created from a high-level dialog between an application designer and a graphical application editor. The application editor provides an environment for editing and creating custom applications and automatically creates security partitioning of responsibilities and users, hierarchical menu structures, groupings of database data elements into efficient sets, database transactions and database partitioning without requiring programming in SQL language by an application designer. The computer stores the dictionary in a database for accessing by the universal application. The dictionary customizes the re-usable universal application for interaction with relational databases such as Oracle(r), IBM(r) DB2, and Sybase(r).

...dimensions for analysis, drill down to see the details behind any total, look at multiple attributes of the data, copy an analysis for side-by-side visual analysis, transfer analysis information into an industry-standard... systems, generally requires astute manual programming. Data mover module 230 facilitates movement of data across different database designs, heterogeneous databases, access methods, or file systems located within a network. Data mover module 230 also facilitates...

1/2,AB,KWIC/23 (Item 5 from file: 654)
DIALOG(R)File 654:US Pat.Full.
(c) format only 2000 The Dialog Corp. All rts. reserv.

03057758

Utility
OPEN ARCHITECTURE CARDIOLOGY INFORMATION SYSTEM

PATENT NO.: 6,004,276
ISSUED: December 21, 1999 (19991221)
INVENTOR(s): Wright, Gregory John, Seattle, WA (Washington), US (United States of America)
Hochberg, Philip Scott, Kirkland, WA (Washington), US (United States of America)
Bellusci, Darcy B., Redmond, WA (Washington), US (United States of America)
Brinster, Eric Gregory, Everett, WA (Washington), US (United States of America)
Brinton, Mark Willard, Bellevue, WA (Washington), US (United States of America)

States of America)
Folkerts, Sue R., Snohomish, WA (Washington), US (United States of America)
Foster, Brian Timothy, Suquamish, WA (Washington), US (United States of America)
King, Anthony Edward, Seattle, WA (Washington), US (United States of America)
Maloney, Kevin Patrick, Seattle, WA (Washington), US (United States of America)
Newell, Todd Edwin, Kent, WA (Washington), US (United States of America)
Peterson, Eric David, Redmond, WA (Washington), US (United States of America)
Pierce, Thomas Dean, Edmonds, WA (Washington), US (United States of America)
Rabbers, David L., Newcastle, WA (Washington), US (United States of America)
Shoemaker, Linda Jean, Edmonds, WA (Washington), US (United States of America)
Tolan, John Joseph, Snohomish, WA (Washington), US (United States of America)
Wootten, James M., Kirkland, WA (Washington), US (United States of America)
Bolles, Gregory Allin, Snohomish, WA (Washington), US (United States of America)
Goddard, Kathie, Bellevue, WA (Washington), US (United States of America)
Malley, John Anthony, Seattle, WA (Washington), US (United States of America)
Schmidt, Kurt, Redmond, WA (Washington), US (United States of America)
Ly, Chou Ying, Kirkland, WA (Washington), US (United States of America)

ASSIGNEE(s): Quinton Instrument Company, (A U.S. Company or Corporation), Bothell, WA (Washington), US (United States of America)

APPL. NO.: 8-805,841

FILED: March 03, 1997 (19970303)

U.S. CLASS: 600-508 cross ref: 128-923

INTL CLASS: [6] A61N 5-04

FIELD OF SEARCH: 600-508; 600-509; 600-523; 128-906; 128-920; 128-923

References Cited

U.S. PATENT DOCUMENTS

3,058,458	10/1962	Daneman	128-2.6
3,566,370	2/1971	Worthington, Jr. et al.	340-172.5
4,483,346	11/1984	Slavin	128-710
4,739,772	4/1988	Hokanson et al.	128-731
4,804,950	2/1989	Moon et al.	600-523
5,002,062	3/1991	Suzuki	128-696
5,086,778	2/1992	Mueller et al.	128-696
5,189,609	2/1993	Tivig et al.	364-413.1
5,193,541	3/1993	Hatsuwi	128-630
5,206,807	4/1993	Hatke et al.	364-413.3
5,277,184	1/1994	Sacker	600-508
5,331,549	6/1994	Crawford, Jr.	600-523

5,355,892	10/1994	Saltzstein et al.	128-710
5,701,894	12/1997	Charry et al.	600-509

PRIMARY EXAMINER: Kamm, William E.
ATTORNEY, AGENT, OR FIRM: Graybeal Jackson Haley LLP
CLAIMS: 14
EXEMPLARY CLAIM: 1
DRAWING PAGES: 100
DRAWING FIGURES: 168
ART UNIT: 377
FULL TEXT: 7724 lines

ABSTRACT

A clinical information reporting system for use with an electronic database for a health care facility, the electronic database being a rotational and modular database for the provision of a scalable and extensible configuration preferably consisting of a workstation as the base configuration and being configurable for use in small and medium network situations and being particularly adapted for the receipt, manipulation, modification and generation of cardiology reports such as resting ECG records and stress ECG records.

... as though they were physically in the office, directly connected to the network or local database (although network access to a remote workstation will be slower). The system preferably allows three...though only 73 were actually seen. Finally, the multi-database user is preferably able to copy data from one database to another easily (such as using "drag and drop") and communication...

1/2,AB,KWIC/24 (Item 6 from file: 654)
DIALOG(R)File 654:US Pat.Full.
(c) format only 2000 The Dialog Corp. All rts. reserv.

03052581

Utility

METHOD FOR VIDEO TELEPHONY OVER A HYBRID NETWORK

PATENT NO.: 5,999,525
ISSUED: December 07, 1999 (19991207)
INVENTOR(s): Krishnaswamy, Sridhar, Cedar Rapids, IA (Iowa), US (United States of America)
Elliott, Isaac K., Colorado Springs, CO (Colorado), US (United States of America)
Reynolds, Tim E., Iowa City, IA (Iowa), US (United States of America)
Forgy, Glen A., Iowa City, IA (Iowa), US (United States of America)
Solbrig, Erin M., Cedar Rapids, IA (Iowa), US (United States of America)
ASSIGNEE(s): MCI Communications Corporation, (A U.S. Company or Corporation), Washington, DC (District of Columbia, US (United States of America)
[Assignee Code(s): 40955]
APPL. NO.: 8-751,215
FILED: November 18, 1996 (19961118)

U.S. CLASS: 370-352 cross ref: 370-389; 370-392; 379-90.01; 379-93.07;
379-114
INTL CLASS: [6] H04L 12-66; H04L 12-28; H04L 12-56
FIELD OF SEARCH: 370-352; 370-383; 370-389; 370-390; 370-392; 370-401;
370-468; 370-463; 370-493; 370-410; 379-100.13; 379-93.8;
379-93.7; 379-93.14; 379-93.29; 379-90.1; 379-114; 455-5.1;
455-6.3; 348-14; 348-17; 348-10; 348-15

References Cited

U.S. PATENT DOCUMENTS

4,100,377	7/1978	Flanagan	370-435
4,771,425	9/1988	Baran et al.	370-458
4,969,184	11/1990	Gordon et al.	379-100.13
5,068,888	11/1991	Scherk et al.	379-100.11
5,526,353	6/1996	Henly et al.	370-392
5,541,927	7/1996	Kristol et al.	
5,561,670	10/1996	Hoffert et al.	370-410
5,590,181	12/1996	Hogan et al.	379-114
5,604,737	2/1997	Iwarni et al.	370-352
5,608,786	3/1997	Gordon	370-352
5,610,910	3/1997	Focsaneanu et al.	370-351
5,636,216	6/1997	Rox et al.	370-402
5,646,982	7/1997	Hogan et al.	379-89
5,712,907	1/1998	Wegner et al.	379-112
5,724,355	3/1998	Bruno et al.	370-401

OTHER REFERENCES

Computer Telephony, CT and the 'Net, Mar. 1996, pp. 219-221.

tele.com, Internet Telephony, Jun. 1996, pp. 68-72.

Newton, The Personal Side of CT, Jan. 1997, pp.12,14.

Retkwa, Telephone Politics, Jun. 1996 pp. 54-60.

Kim, Talk is Cheap, Jul. 1996, pp. 34-39.

Platt, Why Iso Ethernet Will Change the Voice and Video Worlds, Apr. 1996, pp. 55-59.

Margulies, CT's Cyberdate With The 'Net, Aug. 1996, pp. 28-29.

Telephony on the Internet Workshop Information.

Bethony, HAHTSite Gives Pros Everything They Need, Mar. 1997, pp. 36-37.

'Net Telephony Spec Recommended, Mar. 1997, pp. 12-13.

Civanlar et al., FusionNet: Joining the Internet & Phone Networks for Multimedia Applications, 1996, pp.431-432.

Serrano, Evolution of a Hybrid Fibre Coaxial Network for Multimedia Interactive Services, Oct. 1996, pp.249-253.

Hurwicz, Faster, Smarter Nets, Apr. 1997, pp. 83-89.

Internet By Satellite.

Low, WebIN-An Architecture for Fast Deployment of IN-based Personal Services, Apr. 1996, vol. 1.

The Intelligent Web, Apr. 1996, vol. 2.

Grami, et al., The Role Of Satellites In The Information Superhighway, Jun. 1995, pp. 1577-1581.

Chen et al., ATM and Satellite Distribution of Multimedia Educational Courseware, Jun. 1996, pp. 1133-1137.

Sunaga et al., A Reliable Communication Switching Platform for Quick Service Provisioning, Feb. 1995, pp. 77-82.

Tsuchida et al., Intelligent Dynamic Service Provisioning Architecture in the Multimedia Era, Apr. 1996, pp. 1117-1122.

Schreyer et al., Least Cost Call Routing, Apr. 1996, pp. 12-.

Jain, Evolving Existing Narrowband Networks Towards Broadband Networks with IN Capabilities, Apr. 1996.

Gupta et al., Technical Assessment of (T)INA-TMN-OSI Technology For Service Management Applications, Feb. 1994, pp. 877-887.

Ejiri, For Whom The Advancing Service/Network Management, Feb. 1994, pp. 422-433.

Ely, The Service Control Point as a Cross Network Integrator, Apr. 1996, pp. 1-8.

Perret et al., MAP: Mobile Assistant Programming for Large Scale Communications Networks, Apr. 1996, pp. 1128-1132.

Cobbold et al., Enhancements for Integrated Wireless Personal Communications over Metropolitan Area Networks, Apr. 1996, pp. 1370-1376.

Sclavos et al., Information Model: From Abstraction to Application, Feb. 1994, pp. 183-195.

Aidarous et al., The Role Of The Element Management Layer In Network Management, Feb. 1994, pp. 59-69.

Inamori et al., Applying TMN to a Distributed Communications Node System with Common Platform Software, Feb. 1995, pp. 83-87.

Kolarov et al., End-to-end Adaptive Rate Based Congestion Control Scheme for ABR Service in Wide Area ATM Networks, Feb. 1995, pp. 138-143.

Duan et al., Efficient Utilization of Multiple Channels between two Switches in ATM Networks, Feb. 1995, pp. 1906-1911.

Kishimoto, Agent communication system for multimedia communication services, Mar. 1996, pp. 10-17.

Elia et al., Skyplex: Distributed Up-link for Digital Television via Satellite, Dec. 1996, pp. 305-313.

Kelly, Mountaintop office keeps skiers in touch, USA Today, vol. 15 No. 112.

Schulzrinne et al., RFC 1890--RPT Profile for Audio and Visual Conferences With Minimal Control, Jan. 1996.

Eriksson, Mbone: The Multicast Backbone, Aug. 1994.

Sullivan, Videoconferencing Arrives on the Internet, Aug. 1996.

Kahn, Videoconferencing Debuts on the Internet, Feb. 1995.

Macedonia, M.R. and Brutzman, D.P., "MBone Provides Audio and Video Across the Internet", IEEE Computer, pp. 30-36, Apr. 1994.

Kumar, V., "Internet Multicasting: Internet's Next Big Thing", ICAST White Paper, pp. 1-11, Jan. 1996.

Schulzrinne, H. et al., "RFC 1889--RTP: A Transport Protocol for Real-Time Applications", Jan. 1996.

PRIMARY EXAMINER: Chin, Wellington
ASST. EXAMINER: Carman, Melissa Kay
CLAIMS: 30
EXEMPLARY CLAIM: 11
DRAWING PAGES: 134
DRAWING FIGURES: 190
ART UNIT: 273
FULL TEXT: 25206 lines

ABSTRACT

Telephone calls, data and other multimedia information including video, audio and data is routed through a switched network which includes transfer of information across the internet. Users can transmit video, audio and data communications of designated quality over the internet to other registered video telephony users. Users can manage more aspects of a network than previously possible, and control network activities from a central site.

... configured for that service engine 2134, as needed. Caching can be controlled by the ISP database server 2182, or controlled by the database of the ISP database server 2182. Data may...high access level additionally allows Grant and Validate single use TOKEN commands as well.

This database is also accessed by the Web Administrators to Create, Read, Update and Delete records. Access...his messages. The user's profile information and the user's messages may reside in different locations, so the interface is able to connect to both places. Profile and messaging capabilities... whereby the PC Client can export a comma delimited or DBF formatted file to the database of lists.

The user is able to create and modify recipient address information through his... A component integration architecture is a set of architectural mechanisms which allow software modules in different process spaces to utilize each other's capabilities or functions. This is generally done by... could associated with each level. The caller would select a quality level; perhaps by dialing different 800 number services first.

(1) Domestic Destination

Neither the calling nor the called parties need...

1/2,AB,KWIC/25 (Item 7 from file: 654)
DIALOG(R)File 654:US Pat.Full.
(c) format only 2000 The Dialog Corp. All rts. reserv.

02989227

Utility
DISTRIBUTED DATA BASE SYSTEM

PATENT NO.: 5,940,837
ISSUED: August 17, 1999 (19990817)
INVENTOR(s): Samuelsson, Bo Mikael, Stockholm, SE (Sweden)
Bjornerstedt, Anders, Danderyd, SE (Sweden)
ASSIGNEE(s): Telefonaktiebolaget LM Ericsson, (A Non-U.S. Company or
Corporation), Stockholm, SE (Sweden)
[Assignee Code(s): 27980]
APPL. NO.: 8-977,765
FILED: November 26, 1997 (19971126)
PRIORITY: 9400410, SE (Sweden), February 8, 1994 (19940208)

This application is a continuation of application Ser. No. 08-384,733,
filed Feb. 7, 1995 now U.S. Pat. No. 5,761,672.

U.S. CLASS: 707-104 cross ref: 707-100
INTL CLASS: [6] G06F 17-30
FIELD OF SEARCH: 707-10; 707-9; 707-8; 707-7; 707-6; 707-5; 707-4; 707-3;
707-2; 707-1; 707-104; 707-103; 707-102; 707-101; 707-100;
707-206; 707-205; 707-204; 707-203; 707-202; 707-201; 707-200;
395-684; 395-671; 395-676; 364-280.6

References Cited

U.S. PATENT DOCUMENTS

4,901,231	2/1990	Bishop et al.	707-205
4,980,822	12/1990	Brantley	711-202
5,187,790	2/1993	East et al.	395-684
5,247,673	9/1993	Costa et al.	711-205
5,280,612	1/1994	Lorie et al.	707-8
5,428,782	6/1995	White	395-671
5,428,878	7/1995	Mueller	28-185
5,442,791	8/1995	Wrabetz et al.	395-674
5,530,800	6/1996	Larsson et al.	395-181
5,548,750	8/1996	Larsson et al.	707-204
5,560,005	9/1996	Hoover et al.	707-10
5,606,659	2/1997	M.ang.loy et al.	395-183.1

NON-U.S. PATENT DOCUMENTS

387 644	9/1990	EP (European Patent Office)
405 829	1/1991	EP (European Patent Office)
497 600	8/1992	EP (European Patent Office)

OTHER REFERENCES

"Principles of Distributed Database Systems", M.T. Ozsu et al., Prentice-Hall, pp. 510-511, 1993.

PRIMARY EXAMINER: Ho, Ruay Lian
ATTORNEY, AGENT, OR FIRM: Burns, Doane, Swecker & Mathis, L.L.P.
CLAIMS: 10
EXEMPLARY CLAIM: 1
DRAWING PAGES: 7
DRAWING FIGURES: 18
ART UNIT: 271
FULL TEXT: 833 lines

ABSTRACT

In a distributed data base system, different parts of the data base are handled by each of a number of interconnected processors. The different data base parts contain a number of data entities. There are provided for each of such data entities global information relating to the processor in which the data entity is located, and local information relating to the location of the data entity in the own processor. The global information is located in each processor in the system in the form of global information common to and specific for each set of data entities. More particularly, the sets of data entities comprise distribution entities each of which includes information relating to a number of instances of a certain type of data entity located in a certain processor, and information by which the address to this processor can be found.

ABSTRACT

In a distributed data base system, different parts of the data base are handled by each of a number of interconnected processors. The different data base parts contain a number of data entities. There are provided for each of such data...

BACKGROUND

The present invention generally relates to a distributed data base system in which different parts of a data base are handled by one each of a number of interconnected processors, the different data base parts containing a number of data entities.

More particularly the invention relates to data base...a first aspect of the invention the above objects have been attained in a distributed data base system in which different parts of a database are handled by one each of a number of interconnected processors. The different database parts include a number of data entities. For each such data entity there is global...to the data entity and an identification number for the class in question. In said data base system different parts of a database

are handled by one each of a number of interconnected processors. The different database parts contain a number of data entities of the kind just referred to above, and...base system, a data entity belonging to a specific class of data entities. In said data base system different parts of a database are handled by one each of a number of interconnected processors. The different database parts contain a number of data entities of the kind just referred to above, and...stated objects are attained, according to the invention, by a distribution entity in a distributed database system, in which different parts of a data base are handled by each of a number of interconnected processors. Said different database parts contain a number of data entities. Said distribution entity includes information regarding a number...

... stated objects are attained, according to the invention, by a distribution entity in a distributed database system, in which different parts of a database are handled by each of a number of interconnected processors. Said different database parts contain a number of data entities. Said distribution entity includes information common and specific a distributed database system, in which different parts of a database are handled by each of a number of interconnected processors. The different database parts contain a number of data entities. Said identity entity includes first information regarding a...

... the processor 54 a copy 66" of the object 66', the user process 52 accessing attributes in the copy 66", indicated by an arrow 72', by means of the agent object 70. This will...

... distributed database system, including a data base, and a number of interconnected processors for handling different parts of said data base, said data base parts including a number of data entities, each such data entity having...

...as well as information identifying the data entity.

3. A distribution entity in a distributed database system, in which different parts of a data base are handled by each of a number of interconnected processors, the different database parts containing a number of data entities, said distribution entity including information regarding a number...

...as well as information identifying the data entity.

4. A distribution entity in a distributed database system, in which different parts of a database are handled by each of a number of interconnected processors, the different database parts including a number of data entities, said distribution entity containing information common and specific...

...information identifying the data entity.

5. Identity entity for a data entity in a distributed database system, in which different parts of a database are handled by each of a number of interconnected processors, the different database parts containing a number of data entities, said identity entity including:
information regarding ... distributed database system, including a data base, and a number of interconnected processors for handling different parts of said data base, said data base parts including a number of objects, each such object having in association...well as information identifying the object.

8. A distribution entity in an object oriented distributed database system, in which different parts of a data base are handled by each of a number of interconnected processors, the different database parts containing a number of objects, said distribution entity including information regarding a number of...

...well as information identifying the object.

9. A distribution entity in an object oriented distributed database system, in which different parts of a database are handled by each of a number of interconnected processors, the different database parts including a number of objects, said distribution entity containing information common and specific to...

...information identifying the object.

10. Identity entity for an object in an object oriented distributed database system, in which different parts of a database are handled by each of a number of interconnected processors, the different database parts containing a number of objects, said identity entity including: information regarding a distribution entity...

1/2,AB,KWIC/26 (Item 8 from file: 654)
DIALOG(R)File 654:US Pat.Full.
(c) format only 2000 The Dialog Corp. All rts. reserv.

02932705

Utility

SYSTEM, METHOD AND ARTICLE OF MANUFACTURE FOR REMOTE VIRTUAL POINT OF SALE PROCESSING UTILIZING A MULTICHANNEL, EXTENSIBLE, FLEXIBLE ARCHITECTURE

PATENT NO.: 5,889,863
ISSUED: March 30, 1999 (19990330)
INVENTOR(s): Weber, Jay C., Menlo Park, CA (California), US (United States of America)
ASSIGNEE(s): VeriFone, Inc , (A U.S. Company or Corporation), Santa Clara, CA (California), US (United States of America)
[Assignee Code(s): 29731]
APPL. NO.: 8-664,824
FILED: June 17, 1996 (19960617)
U.S. CLASS: 380-25 cross ref: 380-9; 380-23; 380-24; 380-49; 705-26; 705-39; 705-40; 705-44
INTL CLASS: [6] H04L 9-00; G06F 17-60
FIELD OF SEARCH: 705-26; 705-27; 705-35; 705-39; 705-40; 705-41; 705-42; 705-43; 705-44; 380-9; 380-23; 380-24; 380-25; 380-49; 380-50; 380-59

References Cited

U.S. PATENT DOCUMENTS

3,651,511	3/1972	Andrews et al.	
3,956,615	5/1976	Anderson et al.	
4,277,837	7/1981	Stuckert	
4,303,904	12/1981	Chasek	340-23
4,454,414	6/1984	Benton	235-379

4,614,861	9/1986	Pavlov et al.	235-380
4,630,201	12/1986	White	
4,689,478	8/1987	Hale et al.	235-380
4,766,293	8/1988	Boston	235-379
4,799,156	1/1989	Shavit et al.	
4,859,837	8/1989	Halpern	235-380
4,877,950	10/1989	Halpern	
4,906,828	3/1990	Halpern	235-379
4,935,962	6/1990	Austin	380-25
4,968,873	11/1990	Dethloff et al.	235-380
4,992,646	2/1991	Collin	235-375
5,016,274	5/1991	Micali et al.	380-23
5,030,806	7/1991	Collin	235-375
5,175,416	12/1992	Mansvelt et al.	235-379
5,221,838	6/1993	Gutman et al.	235-379
5,283,819	2/1994	Glick et al.	
5,297,030	3/1994	Vassigh	705-25
5,420,405	5/1995	Chasek	235-379
5,440,634	8/1995	Jones et al.	380-24
5,442,791	8/1995	Wrabetz et al.	
5,448,045	9/1995	Clark	235-382
5,452,352	9/1995	Talton	379-355
5,453,601	9/1995	Rosen	235-379
5,455,407	10/1995	Rosen	235-380
5,459,304	10/1995	Eisenmann	235-380
5,465,291	11/1995	Barrus et al.	
5,475,826	12/1995	Fischer	
5,476,259	12/1995	Weingardt	
5,478,993	12/1995	Derksen	235-380
5,485,510	1/1996	Colbert	379-145
5,506,832	4/1996	Arshi	
5,557,518	9/1996	Rosen	
5,590,038	12/1996	Pitroda	385-241
5,590,197	12/1996	Chen et al.	380-24
5,671,279	9/1997	Elgamal	380-23
5,671,280	9/1997	Aucsmith et al.	380-30
5,677,955	10/1997	Doggett et al.	380-24
5,715,314	2/1998	Payne et al.	380-24
5,729,594	3/1998	Klingman	
5,742,845	4/1998	Wagner	
5,754,772	5/1998	Leaf	
5,793,966	12/1998	Amstein et al.	

NON-U.S. PATENT DOCUMENTS

172 670 A2	2/1986	EP (European Patent Office)
256 768 A3	2/1988	EP (European Patent Office)
256 768 A2	2/1988	EP (European Patent Office)
326 699 A	8/1989	EP (European Patent Office)
363 122 A3	4/1990	EP (European Patent Office)
363 122 A2	4/1990	EP (European Patent Office)
416 482 A	3/1991	EP (European Patent Office)
527 639 A	2/1993	EP (European Patent Office)
256 768 B1	3/1994	EP (European Patent Office)
363 122 B1	12/1994	EP (European Patent Office)
658 862 A	6/1995	EP (European Patent Office)
666 681 A	8/1995	EP (European Patent Office)

668 579 A	8/1995	EP (European Patent Office)
2 251 098	6/1992	GB (United Kingdom)
WO 91-16691	10/1991	WO (World Intellectual Property Org)
WO 93-08545	4/1993	WO (World Intellectual Property Org)

OTHER REFERENCES

Webpage for the Internet Shopping Network (ISN) on the Internet at www.internet.net. The website has been operational since Apr. 1994, but the copyright for the present form of the webpage is 1998, Apr. 1994.

Warr, Michael. "Business Wants Telecom of the Future--Today," Telephony's SUPERCOMM Wrap-up, pp. 12-13. Apr. 1991.

Muller, R., "Lon-Das Universelle Netzwerk, Teil 1." Elektronik., vol. 40, No. 22, 29, Oct. 1991, Munchen De, pp. 59-69, XP000268228.

Snow, C.R. et al: "Simple Authentication" Software Practice & Experience., vol. 24, No. 5, May 1994, Chichester GB, pp. 437-447, XP0006555455, pp. 440-441.

Stallings, W. "Data and Computer Communications", 1994, MacMillan Publishing Co., New York, US, XP002069639, pp. 636-644, 636-666.

Anderson, R. et al. "NetCard--a Practical Electronic-cash System." International Workshop Proceedings, Security Protocols. International Workshop, Cambridge, UK, Apr. 10-12. (No Year) pp. 49-57 XP00203977.

Anderson, R.J., UEPS--A Second Generation Electronic Wallet, (1992) University of Cambridge Computer Laboratory, pp. 411-418.

Bank Systems Technology, SET Tool Kit for Secure Commerce, (May 1996) p. 16.

Bellare et al., iKP--A Family of Secure Electronic Payment Tools, USENIX Association, First USENIX Workshop on Electronic Commerce, (Jul. 11-12, 1995) pp. 89-106.

Bryant, A., Am I Bid Six? Click to Bid Six!, The New York Times, (Mar. 13, 1996) pp. D1-D6.

Camp et al., Token and Notational Money in Electronic Commerce, USENIX Association, First USENIX Workshop on Electronic Commerce, (Jul. 11-12, 1995), pp. 1-12.

Cox et al., NetBill Security and Transaction Protocol, USENIX Association, First USENIX Workshop on Electronic Commerce, (Jul. 11-12, 1995) pp. 77-88.

One-Click Software Distribution Via the Web, Cutting Edge, Datamation, (May 1, 1996), p. 16.

Software Taps Net for Supply Data Sharing, Purchasing, EBN, (Apr. 22, 1996), p. 50.

Flohr, U., Electronic Money, Byte, (Jun. 1996), p. 74.

Gifford, et al., Payment Switch for Open Networks, USENIX Association,

First USENIX Workshop on Electronic Commerce, (Jul. 11-12, 1995), pp. 69-75.

Gosling, et al., The Java Language Environment a White Paper, Sun Microsystems Computer Company, (May 1995).

Jones, et al., Securing the World Wide Web, Smart Tokens and Their Implementation, World Wide Web Journal, O'Reilly & Associates, Inc., (Dec. 11-14, 1995), pp. 397-409.

Kamens, J., Retrofitting Network Security to Third-Party Applications--The SecureBase Experience, USENIS Association, UNIX Security Symposium IV, (1993) pp. 41-57.

Marshall, M., Banking on the Internet, Communications Week, (May 20, 1996) No. 611.

Messmer, E., ActiveX Pioneer Pushes a Commerce, Network World, (May 6, 1996) p. 33.

Messmer, E., Edify Soft to Let Banks Open Doors Online, Network World, (May 20, 1996).

Messmer, E., Start-Up Puts Security SOCKS on Window Apps, Network World, (May 20, 1996).

Microsoft and VeriFone Announce Agreement to Deliver Commerce-enabled Internet Retailing Solutions, Microsoft Press Release, (Aug. 5, 1996) pp. 1-3.

Real Security, Mondex Magazine, (Summer 1996) pp. 5-6.

What's Up Doc?, That's Infotainment, Mondex Magazine, (Summer 1996) pp. 8-10.

Ready to Go. The Trillion Yen Business, Mondex Magazine, (Summer 1996) pp. 27-29.

Morgan, L., Cashing In: The Rush is on to Make Net Commerce Happen, Internet World, (Feb. 1995), pp. 48-51.

Nash, et al., Vendors Deliver IS-Specific Apps Over the 'Net, News (May 6, 1996) p. 16.

Nee, E., Hatim Tyabji, Upside, (Sep. 1996) pp. 85-93.

Neuman, et al., Requirements for Network Payment: The NetCheque(tm) Perspective, University of Southern California, (1995) pp. 32-36.

Ozer, K., Online Software Stores, PC Magazine, (May 28, 1996), p. 36.

Rodriguez, K., Pushing the Envelope, Communications Week, (May 13, 1996) pp. 37-39.

Rupley, S., Digital Bucks? Stop Here, PC Magazine, (May 28, 1996), pp. 54-60.

Semilof, M., Boosting Web Business, Communications Week, (May 20, 1996) pp.

31-32.

Sibert et al., The DigiBox: A Self-Protecting Container for Information Commerce, First USENIX Workshop on Electronic Commerce, (Jul. 11-12, 1995), pp. 171-183.

Sirbu, et al., NetBill: An Internet Commerce System Optimized for Network Delivered Services, Carnegie Mellon University, (1995) pp. 20-25.

Sliwa, C., Netscape Unveils New 'Net Commerce Offerings, Network World, (May 13, 1996) p. 10.

Singleton, A., Cash on the Wirehead, Byte, (Jun. 1995) pp. 71-78.

Tang, et al., A Set of Protocols for Micropayments in Distributed Systems, First USENIX Workshop on Electronic Commerce, (Jul. 11-12, 1995) pp. 107-115.

Thompson, et al., A Secure Public Network Access Mechanism, UNIX Security Symposium, (1992) pp. 227-238.

Trommer, D., ECS Catalog Merges EDI/Net Platforms: Enables Online Ordering in EDI Format Over Net, EBN, (May 20, 1996) p. 54.

Trommer, D., GE/Netscape Form Software Venture: Will Focus on Electronic Commerce Solutions, EBN, (Apr. 22, 1996) p. 54.

Vaughan-Nichols, Steven, XVision Turns a PC Into X Terminal for Unix, VMS Host, Government Computer News, Jul. 8, 1996, pp. 38, 42.

Vincenzetti et al., STEL: Secure TELnet, 5th UNIX Security Symposium, Jun. 5-7, 1995.

Wexler, Joanie, AT&T Sell Insurers on the Web, Network World, May 20, 1996, p. 27.

Wiggins, Richard, Business Browser: A Tool to Make Web Commerce Secure, Internet World, Feb. 1995, pp. 52, 54, 55.

Yacobi, Yacov, Efficient Electronic Money, Official Gazette, Apr. 23, 1996, p. 2976.

Yee et al., Secure Coprocessors in Electronic Commerce Applications, First USENIX Workshop on Electronic Commerce, Jul. 11-12, 1995, pp. 155-169.

ABA Banking Journal, Will SET Kill Card Fraud On the Internet?, Apr., 1996, pp. 237-238.

Advertising Age, Visa Turns To Redgate for Online, CD-ROM Work; Sample the Surf; Checkfree, Cybercash Interact; New on the 'Net; EDS Joins the Cyber-Rush, Jul. 17, 1995, pp. 249-250.

AFX News, Microsoft, American Express Unit Sign Internet Payment System Agreement, Feb. 29, 1996, p. 427.

Agence France Presse, Visa, Mastercard Announce Security Standard for Internet, Feb. 1, 1996, p. 85.

The American Banker, Vendors Ready--and Waiting--for E-Commerce, Feb. 2, 1996, pp. 47-50.

The American Banker, News Analysis: Despite Accord, Hard Work Ahead On Security Standard for Internet, Feb. 2, 1996, pp. 51-53.

The American Banker, Microsoft Signs Visa as a Processor; Pact Gives Banks Alternative to Intuit, Feb. 14, 1996, pp. 528-529.

The American Banker, Two New On-Line Alliances Pair Niche Leaders, Feb. 21, 1996, pp. 493-494.

The American Banker, News Analysis: Beware of Deals Like Verifone-Oracle, Banks Told, Feb. 27, 1996, pp. 443-445.

The American Banker, Amex Accepts SET Protocol For Payments On Internet, Mar. 1, 1996, pp. 382-383.

The American Banker, Encryption Software Firm Adopts On-Line Protocol, Mar. 14, 1996, p. 352.

The American Banker, Frontiers, Mar. 18, 1996, pp. 317-319.

The American Banker, Card Briefs: Novus Supporting SET Payment Protocol, Apr. 2, 1996, p. 235.

The American Banker, If It Has To Do With Data Security, Changes Are This 'Little' Company Is in Involved, Apr. 15, 1996, pp. 156-160.

The American Banker, On the Question of Internet Security, A Three-Sided Debate, Apr. 15, 1996, pp. 161-165.

The American Banker, Web Security Firm To Add MC-Visa Protocol, Apr. 23, 1996, pp. 130-131.

The American Banker, Card Briefs: ICverify Internet Tools To Get SET Protocol, May 3, 1996, p. 53.

The American Banker, Mastercard Official Resigns To Lead Internet Security Firm, May 3, 1996, pp. 54-55.

American Marketplace, Visa-Mastercard Security Agreement: A Green Light For Online Commerce, Feb. 8, 1996, pp. 5-6.

Amusement Business, More 'Digital Homeless' Find Place in Cyberspace; Professionals Not Subscribing To An Online Computer Service, Feb. 12, 1996, pp. 536-537.

AP Online, Cable TV's Sci-Fi Channel, Jun. 9, 1995, pp. 259-261.

AP Online, Purchases On Net Studied, Jan. 31, 1996, pp. 171-172.

AP Online, AP Top News At 5 a.m. EST Thursday, Feb. 1, 1996, Feb. 1, 1996, pp. 86-88.

AP Online, AP Top News At 6 a.m. EST Thursday, Feb. 1, 1996, Feb. 1, 1996,

pp. 89-91.

AP Online, AP Top News At 7 a.m. EST Thursday, Feb. 1, 1996, Feb. 1, 1996, pp. 92-94.

AP Online, AP Top News At 8 a.m. EST Thursday, Feb. 1, 1996, Feb. 1, 1996, pp. 95-97.

AP Online, AP Top News At 9 a.m. EST Thursday, Feb. 1, 1996, Feb. 1, 1996, pp. 115-117.

AP Online, AP Financial News At 9:10 a.m. EST Thursday, Feb. 1, 1996, Feb. 1, 1996, pp. 118-122.

AP Online, AP Top News At 10 a.m. EST Thursday, Feb. 1, 1996, Feb. 1, 1996, pp. 125-127.

AP Online, Standard Found For Web Credit, Feb. 1, 1996, pp. 123-124.

AP Online, AP financial News At 11:10 a.m. EST Thursday, Feb. 1, 1996, Feb. 1, 1996, pp. 107-110.

AP Online, AP Financial News At 3:10 p.m. EST Thursday, Feb. 1, 1996, Feb. 1, 1996, pp. 98-102.

AP Online, AP Financial News At 5:10 p.m. EST Thursday, Feb. 1, 1996, Feb. 1, 1996, pp. 103-106.

AP Online, AP Financial News At 5:20 p.m. EST Thursday, Feb. 1, 1996, Feb. 1, 1996, pp. 111-114.

AP Online, Amer Express Backs Rival Ides, Feb. 29, 1996, pp. 428-429.

AP Worldstream, Financial Pages, Feb. 1, 1996, pp. 128-129.

AP Worldstream, Financial Pages, Feb. 29, 1996, pp. 430-432.

AP Worldstream, A Summary of News From the U.S. Virgin Islands, May 25, 1995, pp. 265-268.

Asia, Inc., Internet Security, May 1996, pp. 64-66.

Asia, Inc., Internet Security, May 1996, pp. 67-69.

Asian Banker, Shopping On the Internet, Mar. 1996, pp. 384-388.

Asian Wall Street Journal, Fraud, Nosy Web Pages Torment Internet Users, Mar. 18, 1996, p. 320.

Asiaweek, Protocols, Cyber Security; How to Head Off the Hackers, Feb. 23, 1996, pp. 489-490.

Associated Press, Cable's Sci-Fi Channel Creates World Wide Web `Home Page`, Jun. 9, 1995, pp. 262-264.

Associated Press, Visa and MasterCard Lead Group to Make Credit Purchases Safe On the Net, Jan. 31, 1996, pp. 173-174.

Associated Press, Visa, MasterCard Resolve Technical Differences For On-Line Credit Transactions, Feb. 1, 1996, pp. 130-131.

Associated Press, American Express Endorses Rivals' Ideal for Secure Online Credit, Feb. 29, 1996, pp. 433-434.

Associated Press, American-Express Endorses Rivals' Idea For Secure Online Credit, Mar. 1, 1996, pp. 389-390.

Austin American-Statesman, Standard Proposed For Electronic Verification, Jul. 3, 1995, pp. 251-252.

Austin American-Statesman, Credit Cards To GFet Internet Security; Visa, MasterCard Have Agreed On a Way to Scramble Card Numbers, Feb. 2, 1996, pp. 45-46.

Baltimore Sun, Sun Names former Reporter to lead Move Into Internet; Service Will offer News and Advertising, Jan. 31, 1996, pp. 175-176.

Banker, Banks Take Charge, Mar. 1996, pp. 396-399.

Banker, Product, Mar. 1996, pp. 400-403.

Banker, Technology, Banks Take Charge, Mar. 1996, pp. 391-394.

Banker, Visa and MasterCard Join Forces to Develop Standards, Mar. 1996, p. 395.

Banker, Credit Card Standards, Apr. 1996, p. 239.

Banking Policy Report, Visa and MasterCard Move to Safeguard Card Transactions on Internet, Mar. 4-18, 1996, pp. 370-371.

Bank Systems & Technology, First Union, Open Market Hit the Internet, May 1995, pp. 269-270.

Black Sun Interactive, 3D PointWorld, Downloading, PointWorld, Apr. 16, 1996, p. 1.

Business Journal-Portland, Taking the Plunge Into On-Line Sales, Feb. 9, 1996, pp. 2-4.

Business Times, SNS Online Service Confident of Success, Nov. 27, 1995, pp. 184-186.

Business Times, Opening Windows to Net Security, Mar. 6, 1996, pp. 362-363.

Business Times, Card, IT Leaders Make Shopping On the Net Safer, Apr. 2, 1996, p. 236.

Business Wire, MasterCard International Goes Live On the Internet; New MasterCard World Wide Web Site Home Page Combines Utility and Imagination, Mar. 27, 1995, pp. 294-296.

Business Wire, Adobe and Netscape to Bring Commercial Publishing to the Internet, Mar. 28, 1995, pp. 291-293.

Business Wire, Emerging U.S. Debit Market Attracts International Player
July 27, 1995, pp. 244-245.

Business Wire, VeriSign Inc. to Provide Digital IDs for Open Market's
Secure WebServer; Key Technology for Verifying the Identities of Parties in
Electronic Commerce, Aug. 14, 1995, pp. 241-243.

Business Wire, ComNet '96 Explores Electronic Commerce; Business On the
Internet the Focus of Many Conference Sessions, Jan. 4, 1996, pp. 181-183.

Business Wire, "Computer Within a Floppy Disk" Puts Secure Electronic
Commerce In the Palm of Your Hand, Jan. 17, 1996, pp. 179-180.

Business Wire, RSA Data Security, Inc. Establishes Japanese Subsidiary
Company to Market RSA Encryption Technology to Developers in Japan, Feb. 8,
1996, pp. 7-8.

Business Wire, VeriSign to Provide Digital ID Services for FTP Software's
Esplanade (TM) Web Server for Windows NT; Alliance Will Ensure Secure
Electronic Transactions for Users of New Web Servers, Feb. 12, 1996, pp.
538-540.

Business Wire, First Data and Netscape Offering Internet Payment Processing
Service; New Service Available Now, Feb. 20, 1996, pp. 500-501.

Business Wire, RSA Announces Support for SET Payment Standard Across Entire
Product Line; World's Most Popular Encryption Solution Provider Now
Supports VISA/MasterCard Standard for Secure Payments Over the Internet,
Mar. 4, 1996, pp. 372-373.

Business Wire, Certicom--Special Task Group to Review Secure Electronic
Transaction Protocol Developed by Visa and MasterCard--Sherry E. Shannon
Appointed Chair of the New Task Group, Mar. 15, 1996, pp. 340-341.

Business Wire, Panel of Electronic Commerce Experts to Reveal "What Gates
and McNealy Won't Tell You About Electronic Commerce"--ICat Corp. Convenes
Panel of Pioneers to Discuss the Hype and Reality at New York Trade Show,
Mar. 26, 1996, pp. 289-290.

Business Wire, Major Flaws Seen in Visa/MasterCard Security Plan for
Internet Commerce; Network Security Expert Says RSA Encryption and
Authentication Standard Leaves Consumers Vulnerable to Hackers, Apr. 16,
1996, pp. 154-155.

Business Wire, ICVERIFY to Incorporate SET Specification in its Software
Solutions; SET Specification Provides Long Awaited Internet Security for
Both Customers and Merchants, Apr. 26, 1996, pp. 125-126.

Business Wire, John Gould Joins Terisa Systems As Chief Executive Officer,
Apr. 29, 1996, pp. 102-103.

Business Wire, IBM Leads Industry With Comprehensive Strategy, Technologies
for Electronic Commerce; Electronic Shopping, Secure Transactions, May 1,
1996, pp. 70-75.

Business Wire, L.L. Bean Signs Up With IBM; IBM Announces New Products,
Services that Make Internet Real for Business, May 1, 1996, pp. 76-80.

Business Wire, Electronic Commerce Just Got Real; NETCOM, Federal Express,

Open Market and CheckFree Join iCat to Discuss Breakthrough Electronic Commerce Solution, May 2, 1996, pp. 59-61.

Calgary Herald, Visa and MasterCard Agree On Standard, Feb. 2, 1996, pp. 54-55.

Calgary Herald, 'Net Security Hinders Commerce, Apr. 4, 1996, pp. 228-229.

Canada Newswire, Attention Business/Technology Editors: Special Task Group to Review Secure Electronic Transaction Protocol Developed by Visa and MasterCard, Mar. 15, 1996, pp. 342-343.

CardFAX, A Joint Technical Standard for Security Credit Card Transactions Over the Internet, Feb. 2, 1996, p. 56.

Card News, Security Advances May Improve, Not Perfect, On-Line Transactions, Feb. 5, 1996, pp. 28-30.

Card News, Amex, First Data Initiate On-Line Purchase Efforts, Mar. 4, 1996, pp. 374-375.

Card News, Card News Briefs: Discovery Joins Security Rush, Apr. 1, 1996, p. 240.

Card News, Cards on the Web Addressed, Apr. 29, 1996, pp. 104-105.

Cards International, VeriSign Secures Net Deals, Jul. 20, 1995, pp. 246-247.

Cards International, International: MC and Visa Co-Operate On Internet Specs, Feb. 14, 1996, 530-531.

Cards International, Amex Set to Support Security Specs, Mar. 12, 1996, pp. 356-357.

Charleston Gazette, Secure Internet Credit Code Unveiled, Feb. 2, 1996, pp. 57-59.

U.P.I., Checkfree Partnering With Cybercash, Jul. 19, 1995, p. 248.

Chicago Sun-Times, Visa, MasterCard Agree On Online Security, Feb. 2, 1996, pp. 60-61.

Christian Science Monitor, Visa, MasterCard Tackle Internet Security, Feb. 2, 1996, p. 80.

Columbus Dispatch, Roving Bandits Make Buying Risky Business, Nov. 6, 1994, pp. 312-313.

COMLINE Daily News from Korea, MasterCard, Visa Agree to a Single Security Standard, Feb. 7, 1996, p. 11.

Communications News, Business Banks Its Future On Electronic Commerce; Strategies Being Pursued for Secure Financial Transactions on the Internet; Netcomm Update; Industry Trend or EventCom, Apr. 1996, pp. 241-243.

CommunicationsWeek, MCI Offers Secure Transaction Service, Oct. 2, 1995,

pp. 229-230.

CommunicationsWeek, In Brief; Charge It On the 'Net, Feb. 5, 1996, p. 31.

CommunicationsWeek, On-Line Payment Scheme Arrives, Feb. 26, 1996, pp. 456-458.

CommunicationsWeek, In Brief; Amex 'Set' For Internet, Mar. 4, 1996, p. 376.

CommunicationsWeek, Safety On the 'Net--Can Encryption Offer Peace of Mind to Nervous Network Managers, Mar. 25, 1996, pp. 299-303.

CommunicationsWeek, Tandem, VLSI Partner to Develop Security Chips for Commercial Use, Apr. 15, 1996, pp. 166-167.

CommunicationsWeek, Shop Till You Drop With the JEPI Standard, Apr. 22, 1996, pp. 134-135.

CommunicationsWeek, Terisa, to Add SET to Web Software, Apr. 29, 1996, pp. 106-107.

CommunicationsWeek, Netscape Adds Electronic-Commerce Apps, May 13, 1996, pp. 10-11.

CommunicationsWeek, Internet Security--A Moving Target, May 13, 1996, pp. 12-15.

Computer Conference Analysis Newsletter, UniForm; Conference On Unix and Open Systems With Focus On the Internet; Industry Trend or Event, Feb. 26, 1996, pp. 459-479.

Computer Connection, Telecomm Decency Act Draws Cheers, Jeers and Fears, Feb. 10, 1996, pp. 549-557.

Computer Connection, Internet Security Standards Agreement, Feb. 10, 1996, pp. 558-559.

Computergram International, Microsoft Confounded: Visa-MasterCard Spec Free, Feb. 2, 1996, p. 62.

Computergram International, First Data, Netscape Jointly Deliver First Real-Time On-Line Credit, Apr. 11, 1996, p. 223.

Computer Reseller News, Terisa Systems Enters Channel With Security Products, Apr. 22, 1996, pp. 136-137.

Computer Shopper, AT&T Offers Low-Tech Protection for Internet: No-Deductible Insurance for Online Buyers, May, 1996, pp. 81-82.

Computer Technology Review, Digital Signatures Keep Cyberstreets Safe for Shoppers, Feb. 1996, pp. 132-134.

Computer Weekly, Web Takes the Credit; Visa, MasterCard Join Forces to Develop Secure Payment Systems for Electronic Commerce; Company Business and Marketing, Feb. 8, 1996, pp. 9-10.

Computerworld, News Shorts, Feb. 5, 1996, pp. 32-33.

Computerworld, Microsoft Provides Rapid Net Deployment Ability, Mar. 18, 1996, pp. 321-323.

Computerworld, Briefs, Mar. 18, 1996, p. 324.

Computerworld, Predictions, Apr. 29, 1996, pp. 108-110.

Computerworld, Credit-Card Authorization Set For Net, May 13, 1996, pp. 16-17.

Corporate EFT Report, MasterCard, Visa to Combine Internet Security Standards, Feb. 7, 1996, pp. 12-13.

Corporate EFT Report, Products Could Spur On-Line Transactions, Mar. 6, 1996, pp. 364-365.

Corporate EFT Report, Amex Eyes Internet Security, Mar. 6, 1996, p. 366.

Corporate EFT Report, Corporate EFT Report News Briefs, Apr. 3, 1996, pp. 230-231.

Credit Card Management, Internet Commerce Gets A Boost, Mar. 1996, pp. 404-405.

Credit Card News, Electronic Commerce Gets a Boost, Feb. 15, 1996, pp. 526-527.

Daily Mail, Now Spending Cuts Are On the Cards; Money Mail, Feb. 7, 1996, pp. 14-15.

Daily Telegraph, Card Guard Makes It Safer to Cybershop, Feb. 2, 1996, p. 63.

Daily Telegraph, Innovations: Codes to Beat the Criminal Internet, Feb. 13, 1996, pp. 534-535.

Datamation, Microsoft Plays Internet Catch-U. Microsoft & the Enterprise: I-Nets; Company Business and Marketing; Cover Story, Mar. 15, 1996, pp. 344-348.

Des Moines Register, Safe Shopping On-Line; Card Associations Agree On Internet Security, Feb. 17, 1996, pp. 520-522.

Digital Media, Turning the Page; MCI Switches From News Corp to the Microsoft Network; Letter; Company Business and Marketing Column, Mar. 12, 1996, pp. 358-360.

Discount Merchandiser, Secure Electronic Transactions, Mar. 1996, pp. 406-407.

DM News, Open Market Offers Internet Security; Clients Can Get On the World Wide Web For Less Than \$1,000, Apr. 3, 1995, pp. 281-282.

DM News, Mainstream Alternative For Advertisers; Business Wants to be Visible; Cybercitizens Want to Buy, Feb. 12, 1996, pp. 543-545.

DM News, Canadian Big Guns Set Sights On Skittish Cybershoppers; St. Remy Multimedia, Cogco Cable in Quadruple Play, Feb. 19, 1996, pp. 506-508.

DM News, IBM's Commercial Online Service Will Build DBs, Track Spending, Feb. 19, 1996, pp. 509-510.

Denver Post, On-Line Car Dealer Rings Up 57 Sales In Four Months, Feb. 10, 1995, pp. 299-300.

dot.COM, Internet Data's Payment Service, Mar. 1, 1996, p. 408.

Edge: Work-Group Computing Report, Digital ID: Verisign Inc. To Provide Digital IDS For Open Market's Secure Webserver; Key Technology For Verifying the Identifies of Parties In Electronic Commerce, Aug. 21, 1995, pp. 236-237.

Edge: Work-Group Computing Report, E-Commerce: IBM Leads Industry With Comprehensive Strategy, Technologies for Electronic Commerce; Electronic Shopping, Secure Transactions, May 6, 1996, pp. 48-52.

EDI News, MasterCard, Visa To Combine Internet Security Standards, Feb. 19, 1996, pp. 511-512.

EDP Weekly, Visa, MasterCard Announce Single Technical Standard To Safeguard Payment Card Purchases on Internet, Feb. 12, 1996, p. 546.

EDP Weekly, American Express To License Microsoft Software To Help Secure Transactions Via Internet, Mar. 11, 1996, p. 361.

EDP Weekly, ANSI Committee Creates Special Task Group To Review Secure Electronic Transaction Protocol, Mar. 25, 1996, p. 304.

EDP Weekly, Network Security Expert Notes Major Flaws in Visa/MasterCard Security Plan, Apr. 22, 1996, p. 140.

EFT Report, Service Variety Seen Key to Home Banking's Future, Mar. 29, 1995, pp. 288-290.

EFT Report, MasterCard, Visa To Combine Internet Security Standards, Feb. 14, 1996, pp. 532-533.

Electronic Buyers' News, EC Providers Take On Security--Visa, MC Announce Transaction Standard; GE Intros B-to-B Solution, Feb. 12, 1996, pp. 547-548.

Electronic Buyers' News, SET Controversy Flares Up--Visa, Announce Transaction Standard; GE Intros B-to-B Solution, Feb. 12, 1996, pp. 547-548.

Electronic Engineering Times, Credit-Card Firms Agree On Security, Feb. 5, 1996, p. 34.

Electronic Engineering Times, E-Cash Coming? Bank On It, Feb. 19, 1996, pp. 513-516.

Electronic Engineering Times, Secure Internet Transactions Seen, Feb. 26, 1996, pp. 480-481.

Electronic Engineering Times, Copyright Protection Moves Into Digital Age, Mar. 18, 1996, pp. 325-327.

Electronic Engineering Times, Form Factors Figures Into Security Debate, Apr. 29, 1996, pp. 111-112.

Electronic Marketplace Report, Visa, MasterCard Announce Standard For Securing Internet Transactions, Feb. 6, 1996, pp. 17-18.

Electronic Messaging News, Visa, MasterCard Combine Standards, Feb. 7, 1996, p. 16.

Electronic Messaging News, MasterCard, Visa In Internet Pact, Feb. 26, 1996, p. 482.

Electronic Payments International, Ingenico Buys Innovatron Data Systems, Mar. 1996, pp. 409-410.

Electronic Payments International, Getting All SET For On-Line Commerce, Mar. 1996, pp. 411-412.

Electronic Payments International, The Growing Impact of the Internet, Mar. 1996, pp. 413-415.

Electronic Payments International, Telefonica Makes the Right Calls Before SET, Apr. 1996, pp. 244-245.

Electronic Payments International, Consortium Explores Internet Payments, Apr. 1996, pp. 246-247.

Electronic Payments International, Telefonica Makes the Right Calls Before SET, Apr. 1996, pp. 248-249.

Electronic Payments International, Consortium Explores Internet Payments, Apr. 1996, pp. 250-251.

Exchange, Novell Expands Networked Application and Electronic Commerce Offerings, Mar. 22, 1996, pp. 315-316.

Extel Examiner, Microsoft, American Express Unit Sign Internet Payment System, Feb. 29, 1996, p. 435.

FDCH Political Transcripts, The National Consumers League Holds a News Conference on Combatting Fraud on the Internet; Washington, D.C., Feb. 27, 1996, pp. 446-455.

Federal Document Clearing House Congressional Testimony, Testimony Oct. 17, 1995 Eugene Ludwig Comptroller Office of the Comptroller of the Currency House Banking Financial Institutions and Consumer Credit Bank Consolidation and Interstate Mega-Mergers, Oct. 17, 1995, pp. 214-226.

Federal News Service, Prepared Testimony of Eugene A. Ludwig Controller of the Currency Before the House Committee on Banking and Financial Services Subcommittee on Financial Institutions, Oct. 17, 1995, pp. 195-205.

Federal News Service, Prepared Statement of Joel S. Lisker Senior Vice

President, Security and Risk Management Mastercard International Incorporated Before the House Committee on Banking and Financial Services, Apr. 15, 1996, pp. 168-172.

Federal News Service, Hearing of the House Banking and Financial Services Committee, Apr. 15, 1996, pp. 173-216.

Financial Post, Reaching Out on the Electronic Highway, Mar. 14, 1996, pp. 353-355.

Financial Post, Race on to Come Up With Web Payment System, Apr. 27, 1996, pp. 122-124.

Financial Times, Credit Card Groups to Co-Operate on Internet Security, Feb. 2, 1996, p. 64.

Fresno Bee, Credit Firms Set Internet Security Code, Feb. 2, 1996, p. 65.

Gazette (Montreal), Digital Sermon Packs 'Em In: 1,100 From Business World listen Raptly to Technoguru's Generalities, Apr. 18, 1996, pp. 149-151.

Gazette (Montreal), Bell Global Has High Hopes for Business Network, Apr. 19, 1996, pp. 147-148.

Houston Chronicle, Firms Back Cyberspace Verification System, Jun. 26, 1995, pp. 253-256.

Houston Chronicle, Firms Back Cyberspace Verification System, Jun. 26, 1995, pp. 255-256.

Independent, In Brief: Amex and Microsoft Sign Internet Deal, Mar. 1, 1996, p. 416.

Industry Week, Move Over China, Caught In the Web, May 1, 1995, p. 271.

Information & Interactive Services Report, Microsoft, Wal-Mart Pact Aims for Online Bargain-Hunters, Feb. 23, 1996, pp. 491-492.

InformationWeek, Intranet Tools, E-Mail on the Net to Debut--Major Announcements Expected at Internet World, Electronic Messaging Association Conferences, Apr. 22, 1996, pp. 142-143.

InformationWeek, Cisco Places \$4 Billion Network Bet--StrataCom Buy Seen Extending ATM, Tying Switching and Routing, Apr. 29, 1996, pp. 116-117.

InformationWeek, Netscape's Corporate Push Grows--CompuServe Tie-In Puts Groupware on Internet, May 13, 1996, p. 27.

InformationWeek, In Short; Terisa Names CEO, May 13, 1996, p. 29.

InfoWorld, National Semiconductor's PersonaCard; Card Holds Key to On-Line Security, Nov. 14, 1994, pp. 310-311.

InfoWorld, Standards; Adapt or Die: Internet Standards May Always Be In Flux, Nov. 6, 1995, pp. 187-192.

InfoWorld, At Deadline, Feb. 5, 1996, pp. 35-36.

InfoWorld, RSA Sale May Improve Security, Apr. 22, 1996, p. 144.

InfoWorld, Pipeline, Apr. 22, 1996, p. 145.

InfoWorld, Internet Servers; Netscape Antes Up for Commerce, May 13, 1996, pp. 30-31.

InfoWorld, IBM, HP Preview 'Net products Aimed On-Line Commerce, May 13, 1996, p. 33.

InfoWorld, Web Page Authoring Tool; Internet Creator Builds Sites One Paragraph at a Time; No Need to Master HTML; Tool Enables On-Line Commerce, May 13, 1996, pp. 35-37.

InformationWeek, Europe, Oct. 2, 1995, pp. 231-234.

Interactive Daily, 4. Cyberspace Security Bolstered by Pact, Feb. 2, 1996, p. 68.

Interactive Daily, 5. Microsoft Allies With American Express, Mar. 1, 1996, p. 417.

Interactive Marketing News, Mastercard and Visa Reach Agreement on Security Protocols, Feb. 16, 1996, pp. 523-524.

International Herald Tribune, A Giant Leap for Credit Cards? System to Protect Payments on Internet is Unveiled, Feb. 2, 1996, pp. 66-67.

Investor's Business Daily, The Electronic Wallet: Secure Payment Methods Sought for Internet, Dec. 8, 1994, pp. 305-307.

Investor's Business Daily, CEO Briefing; A4, Mar. 28, 1996, pp. 285-286.

Korea Economic Daily, Mastercard, Visa Agree to a Single Security Standard, Feb. 6, 1996, p. 19.

Los Angeles Times, The Cutting Edge: Special Report/Hot Tips; What's Coming, When, and Whey It's a Big Deal; Next Year Could Bring Start Of On-Line Profits, Dec. 18, 1994, pp. 303-304.

Los Angeles Times, Technology, Feb. 1, 1996, p. 139.

M2 Presswire, Adobe and Netscape to bring Commercial Publishing to the Internet (C) 1994-95 M2 Communications LTD, Mar. 31, 1995, pp. 283-285.

M2 Presswire, Verisign, Inc: VeriSign Inc to Provide Digital IDs for Open Market's Secure WebServer, Aug. 16, 1995, pp. 238-240.

M2 Presswire, Rednet: EDI for the Apple Macintosh and Power PC, Oct. 24, 1995, pp. 193-194.

M2 Presswire, Visa Intl: Security Specifications for Card Transactions on Internet Combined into One Standard, Feb. 1, 1996, pp. 140-141.

M2 Presswire, First Data: FD and Netscape Offering Internet Payment Processing Service New Service Available Now, Feb. 21, 1996, pp. 495-496.

M2 Presswire, Visa: Visa and MasterCard Welcome American Express to Their

Internet Payment System, Mar. 1, 1996, pp. 418-419.

M2 Presswire, Credit Card Research Group: Cards to Make a Clean Sweep of the Cybermarket, Mar. 1, 1996, pp. 420-421.

M2 Presswire, Racal Airtech: Racal Supports the Visa/MasterCard Secure Electronics Transactions, (SET) Specification, May 2, 1996, pp. 62-63.

Media Daily, Microsoft, Visa Announce Specification to Secure Payments, Sep. 27, 1995, p. 235.

Media Daily, Mastercard and Visa Agree on Online Security Standard, Feb. 1, 1996, p. 136.

Media Daily, Netscape Launches Payment System, May 13, 1996, p. 38.

Report on Microsoft, News Briefs: Visa and Mastercard, Apr. 22, 1996, p. 146.

Midrange Systems, GEIS Aims to Stimulate EDI Growth, Mar. 15, 1996, pp. 349-350.

Milwaukee Journal Sentinel, U.S. Postal Service to Enter Electronic Age, Mar. 4, 1996, pp. 379-380.

Multimedia & Videodisc Monitor, Tools & Technology: Mastercard, Visa Agree on Encryption Technology, Mar. 1, 1996, p. 422.

Multimedia Week, Industry Briefs: Encryption, Feb. 5, 1996, p. 39.

Nation's Restaurant News, Amex, Microsoft Seal Security Agreement. American Express Travel Related Services Co. Signs Licensing Agreement With Microsoft Corp.; Brief Article, Mar. 18, 1996, p. 328.

Nave Research Group, Navigating and Acting in Virtual Environments, May 16, 1996, pp. 1-9.

Network Briefing, Visa & Mastercard Agree E-Payment Spec, Feb. 16, 1996, p. 525.

Network Computing, More Than One Way to Skin a Coded Cat, Mar. 15, 1996, p. 351.

Network World, Wells Fargo Hops Aboard 'Net Wagon, Feb. 6, 1995, pp. 301-302.

Network World, An Insecure Feeling Haunts the 'Net, Feb. 12, 1996, pp. 541-542.

Network World, Wal-Mart to Lure Electronic Shoppers With Web Retail Store, Feb. 19, 1996, pp. 504-505.

Network World, News Briefs, Mar. 4, 1996, pp. 377-378.

Network World, Security Specifications Is Full of Holes, Critics Charge, Apr. 22, 1996, pp. 138-139.

Network World, ActiveX Pioneer Pushes Commerce, May 6, 1996, pp. 46-47.

Network World, Ready, SET, Go; American Express, MasterCard, and Visa Throw

Their Combined Weight Behind the SET Payment Protocol for the Web; Merchants May Face a Learning Curve, May 13, 1996, pp. 18-23.

Network World, Effort Aims to Unite 'Net Payment Schemes, May 13, 1996, p. 24.

Network World, Netscape Unveils New 'Net Commerce Offerings, May 13, 1996, pp. 25-26.

News, Credit Card Fraud New Concern of Internet Business, Mar. 16, 1996, pp. 329-330.

Newsbytes News Network, France--Bull Forms Smart Card Subsidiary Apr. 13, 1995, Apr. 13, 1995, pp. 274-275.

Newsbytes News Network, Open Market Intros "Secure" Web Storefront Oct. 17, 1995, Oct. 17, 1995, pp. 206-207.

Newsbytes News Network, Newsbytes Daily Summary Oct. 17, 1995, Oct. 17, 1995, pp. 208-213.

Newsbytes News Network, Commerce Direct Offers Secure Electronic Transactions Jan. 22, 1996, Jan. 22, 1996, pp. 177-178.

Newsbytes News Network, ****Visa, Mastercard Combine Internet Security Standards Feb. 2, 1996, Feb. 2, 1996, pp. 71-72.

Newsbytes News Network, GTE's CyberTrust For Web Electronic Commerce Feb. 6, 1996, Feb. 6, 1996, pp. 20-21.

Newsbytes News Network, AT&T WorldNet Spurs Online Credit Use Feb. 6, 1996, Feb. 6, 1996, pp. 22-23.

Newsbytes News Network, Open Market, Interleaf Team On Web "Secure Doc Mgt" Mar. 5, 1996, Mar. 5, 1996, pp. 367-369.

Newsbytes, Web Marketplace--Online Security Agreement Almost Here Apr. 10, 1996, Apr. 10, 1996, pp. 224-225.

News Tribune, Business Briefly, Feb. 2, 1996, pp. 69-70.

New York Times, A New Standard is Proposed for Electronic Verification, Jun. 26, 1995, pp. 257-258.

New York Times, Plan to Guard Credit Safety on Internet, Feb. 1, 1996, pp. 142-143.

New York Times, Jan. 28-Feb. 3; Attention, Cyber-Shoppers!, Feb. 4, 1996, p. 40.

New York Times, Diary, Feb. 4, 1996, pp. 41-43.

Nightly Business Report, Feb. 1, 1996, pp. 144-154.

Nightly Business Report, Feb. 1, 1996, pp. 150-154.

Orange County Register, Life on the Line; Credit Where Credit is Due, Mar. 31, 1996, pp. 283-284.

Orange County Register, Bits and Pieces, Apr. 7, 1996, pp. 226-227.

PC Magazine, MasterCard and Visa Join Forces for Net Commerce; To Develop the Secure Electronic Transactions Technical Standard for Protecting Credit Card Purchases Made Over the Internet; Technology Information; Brief Article, Mar. 26, 1996, pp. 291-292.

PC Magazine, Skinny Client to Rule on Web; Corporate Intranets Will Fuel a New Breed of Applications; Industry Trend or Event; Brief Article, Mar. 26, 1996, pp. 293-294.

PC Magazine, MasterCard and Visa Join Forces for Net Commerce, Mar. 26, 1996, pp. 295-296.

PC Magazine, Skinny Clients to Rule on Web, Mar. 26, 1996, pp. 297-298.

PC Magazine, Digital Bucks? Stop Here; Electronic Commerce Services; The Web at War: The Battle for the Future of the Internet; Company Business and Marketing, May 28, 1996, pp. 2-5.

PC Magazine, Digital Bucks? Stop Here, May 28, 1996, pp. 6-9.

PC User, Shortlist; News Briefs, Feb. 21, 1996, pp. 497-499.

PC Week, Briefly Noted; News Briefs; Brief Article, Feb. 5, 1996, pp. 37-38.

PC Week, AT&T Ramps Up Internet Commerce, Access to WorldNet Service; Company Business and Marketing; Brief Article, Feb. 19, 1996, p. 517.

PC Week, Big Player; Deals to Speed Net Commerce; Netscape, Oracle, HP Cut Agreements for Credit-Card Systems, Security; Industry Trend or Event, Feb. 26, 1996, pp. 483-484.

PC Week, Microsoft Reposition MSN; Microsoft Network to Offer New Services; Online Service Information; Brief Article, Feb. 26, 1996, pp. 485-486.

PC Week, Microsoft Reposition MSN, Feb. 26, 1996, pp. 487-488.

PC Week, Briefly Noted; News Briefs; Brief Article, Mar. 4, 1996, p. 381.

PC Week, New Security Protocol Spurs Internet Took Kits; Secure Electronic Transaction, Industry Trend or Event, Apr. 15, 1996, pp. 217-218.

PC Week, New Security Protocol Spurs Internet Took Kits, Apr. 15, 1996, pp. 219-220.

PC Week, IBM Takes Charge of E-Commerce: Plans Client, Server Apps Based on SET; NetCommerce Electronic Commerce System; Product Announcement, Apr. 29, 1996, pp. 118-119.

PC Week, IBM Takes Charge of E-Commerce; Plans Client, Server Apps Based on SET, Apr. 29, 1996, pp. 120-121.

Portland Press Herald, L.L. Bean to Offer Ordering By Internet; It's a Bold Move for a Firm That's Usually Slow to Adopt New Technology, May 2, 1996,

pp. 56-58.

PR Newswire, Bank One Joins Commercenet, Oct. 17, 1994, pp. 314-315.

PR Newswire, Rudolph Beware MCI to Offer Cyber-Santas a Faster Route to the Mall Via Mouse; MarketplaceMCI Opens Door to 25 Million New Customers; Integrated Software Package Assures Secure Electronic Transactions, Nov. 22, 1996, pp. 308-309.

PR Newswire, Microsoft Corp. Chooses Software.Net (TM) to be First to Electronically Deliver Microsoft Software; Software.Net to Electronically Market Over Microsoft Products Via the Internet, Oct. 17, 1995, pp. 227-228.

PR Newswire, Visa and MasterCard Combine Security Specifications for Card Transactions on the Internet into One Standard; Move Expected to Accelerate Development of Electronic Commerce and Bolster Consumer Confidence in the Security of Cyberspace Transactions, Feb. 1, 1996, pp. 155-156.

PR Newswire, SAIC is .English Pound.Yourservice for Secure Electronic Transactions on the Internet, Feb. 29, 1996, pp. 436-437.

PR Newswire, American Express Signs Licensing Agreement With Microsoft to Make Secure Purchases Over the Internet, Feb. 29, 1996, pp. 438-439.

PR Newswire, Visa and Mastercard Welcome American Express, Feb. 29, 1996, pp. 440-441.

PR Newswire, Centura Announces the Next Step in Online Money Management, Apr. 15, 1996, pp. 221-222.

PR Newswire, Industry Security Leader Racal Supports Visa/Mastercard Proposal for Internet, Apr. 17, 1996, pp. 152-153.

PR Newswire, Spyglass(TM) Supports Microsoft's ACTIVEX, SET, PCT and ISAPI With Introduction of New Spyglass Web Technology Kits, Apr. 23, 1996, pp. 132-133.

PR Newswire, Cybersoure's New Internet Commerce Services Provide Software Publishers Turn-Key Electronic Transaction and Distribution Services; Qualcomm, Insignia, Wall Data and Seven Other Publishers Choose CyberSource to Distribute Products Via the Internet, Apr. 30, 1996, pp. 99-101.

PR Newswire, 1996 Olympic Games Web Site Proves a Successful as Venue for Olympic Ticket Sales; IBM-Developed Server Enables Secure Electronic Transactions for a Large Number of Consumers, May 1, 1996, pp. 83-84.

PR Newswire, Dynamic Duo Taxware and IBM; Partners on the Commerce.Net, May 1, 1996, pp. 85-86.

PR Newswire, DocuMagix Hotpage Available Now Online Via Software.Net; Software.Net Offers DocuMagix HotPage with Exclusive Custom Content, May 7, 1996, pp. 44-45.

PR Newswire, Netscape Announces Netscape Livepayment (TM) to Facilitate Internet Commerce; Leading Companies to Support Netscape's Open, Cross-Platform Software for Online Credit Card Processing, May 13, 1996, pp. 39-41.

Record, Security is Going on Line; Mastercard, Visa Agree on Standard, Feb. 2, 1996, pp. 73-75.

Reuters, Bank One Corp <One.N> Says Joins Commercenet, Oct. 17, 1994, p. 316.

Reuters, MasterCard, Visa to Set Electronic Standard NYT, Feb. 1, 1996, p. 160.

Reuters, Visa and Mastercard Adopt Joint Internet Standard, Feb. 1, 1996, pp. 164-165.

Reuters, GE<GE.N> Info Services Debuts net Commerce System, Feb. 6, 1996, pp. 24-25.

Reuters, AMEX <AXP.N>, Microsoft <MSFT.O> In Pact, Feb. 29, 1996, p. 442.

Reuters, Netscape<NSCP.O> Offers Secure Internet Collection, May 13, 1996, p. 42.

Reuter Business Report, America Online, Others Push for Net Security, Apr. 11, 1995, pp. 276-277.

Reuter Business Report, Visa and Mastercard Adopt Joint Internet Standard, Feb. 1, 1996, pp. 158-159.

Reuter Business Report, Mastercard, Visa to Set Electronic Standard NYT, Feb. 1, 1996, p. 157.

Reuter Business Report, Improving Internet Safety to Protect Commerce, Apr. 3, 1996, pp. 232-234.

Reuter European Business Report, America Online, Others Push for Net Security, Apr. 11, 1995, pp. 278-279.

Reuter European Business Report, Mastercard, Visa to Set Electronic Standard--NYT, Feb. 1, 1996, p. 161.

Reuter European Business Report, Visa and Mastercard Adopt Joint Internet Standard, Feb. 1, 1996, pp. 162-163.

Reuters World Service, MasterCard, Visa to Set Electronic Standard--NYT, Feb. 1, 1996, p. 169.

Risk Management, Are You Exposed on the Internet? Security Issues and Data Protection; Circuit Breakers, Apr. 1996, pp. 252-254.

Rocky Mountain News, Visa, MasterCard Agree on 'Net Security; Deal Allows to Offer Customers Greater Protection in On Line Services, Feb. 2, 1996, pp. 76-77.

Rocky Mountain News, The Web: It's Anybody's Business; Colorado Retailers and Service Companies Caught Up in Awesome Potential of Internet, Mar. 24, 1996, pp. 305-310.

Sacramento Bee, Credit Card Standard Set for Net, Feb. 23, 1996, pp. 78-79.

The San Diego Union-Tribune, Business; Ed. 1,2,3,4,5,6,7,8; Pg. C-2, Mar.

1, 1996, pp. 423-424.

The San Francisco Chronicle, Mastercard, Visa Accord on Internet Credit-Card Giants Agree on a Security Standard, Feb. 1, 1996, pp. 137-138.

The San Francisco Examiner, Credit-Card Companies OK Internet Security Deal, Feb. 1, 1996, pp. 166-167.

The San Francisco Examiner, Infobahn leads to a Volvo Dealer, Mar. 1, 1996, pp. 297-298.

Seybold Report on Desktop Punlicshjing, Visa, MasterCard Adopt SET, Feb. 19, 1996, pp. 518-519.

South China Morning Post, Business; Banking; p. 7, Mar. 30, 1995, pp. 286-287.

Standard & Poor's Emerging & Special Situation, New Issues--Cybercash Avoid, Feb. 20, 1996, pp. 502-503.

The Straits Times (Singapore), Larger NetworkAsia Show This Year, Apr. 25, 1995, pp. 272-273.

The Straits Times (Singapore), Credit Card Firms Devise Joint Net Payment Scheme, Feb. 2, 1996, p. 81.

The Straits Times (Singapore), Music Scene Alive and Thriving Since the '30s, Feb. 6, 1996, pp. 26-27.

The Straits Times (Singapore), Concern Grows Over Credit Card Debts, Mar. 24, 1996, pp. 311-314.

Sunday Times, Credit Card Set Standard for Net Buys, Feb. 4, 1996, p. 44.

Telecomworldwire, Global Players Unite on Payment Standards, Feb. 1, 1996, p. 168.

Telecomworldwire, Sidewire: Science Applications International Corp, a US Provider of Information and Network, Mar. 1, 1996, p. 425.

Telecomworldwire, Adobe, Netscape Form Major Commercial Internet Publishing Plan, Apr. 4, 1995, p. 280.

The Toronto Star, Firm Unveils Secure Net Paying System, Mar. 27, 1996, pp. 287-288.

Origin Universal New Services Limited, Racal Supports the Visa/Mastercard Secure Electronics Transactions (SET), May 1, 1996, pp. 87-88.

Upside, The Cyber Bowl, Apr. 1996, pp. 255-266.

Upside, The Key to Security, Apr. 1996, pp. 267-276.

Upside, End of the Line for On-Line Services?, May 1996, pp. 89-98.

U.S. Banker, Card Pact Weaves A Tighter Net, Mar. 1996, p. 426.

Wall Street Journal, Visa, Mastercard Reach an Agreement for Single System of Internet Payment, Feb. 1, 1996, p. 170.

The Washington Post, Feb. 2, 1996, pp. 83-84.

The Washington Post, Give Us Some Credit: Your Card is Safe; There Are Many Very Good Reasons Not to Shop On-Line. Fear That Your Credit Card Number Will be Abused Should Not Be One of Them, Apr. 24, 1996.

The Washington Post, Who Was That Masked Cybershopper?; MasterCard-Visa Agreement on Credit Card Security May Make On-Line Commerce Fly, Feb. 2, 1996, p. 82.

Working Woman, Adventure On-Line . . . ; Using Online Services to Make Travel Arrangements, Apr. 1996, pp. 277-282.

Your Money, Brokers Not Equal When It Comes to Charging Customers, Mar. 16, 1996, pp. 331-337.

Your Money, Credit Card Fraud New Concern of Internet Business, Mar. 16, 1996, pp. 338-339.

Borenstein et al., MIME (Multipurpose Internet Mail Extensions) Part One: Mechanisms for Specifying and Describing the Format of Internet Message Bodies, Borenstein & Freed, Sep. 1993.

Fielding et al., Hypertext Transfer Protocol--HTTP/1.1, Fielding, Frystyk, Berners-Lee, Gettys and Mogul, May 2, 1996.

Fielding et al., Hypertext Transfer Protocol--HTTP/1.1, Fielding, Frystyk, Berners-Lee, Gettys and Mogul, Jun. 3, 1996.

An RSA Laboratories Technical Note, Version 1.5, Revised Nov. 1, 1993.

Internet Protocol, DARPA Internet Program Protocol Specification, University of Southern California, Sep. 1981.

Transmission Control Protocol, DARPA Internet Program Protocol Specification, University of Southern California, Sep. 1981.

PRIMARY EXAMINER: Gregory, Bernarr E.

ATTORNEY, AGENT, OR FIRM: Warren, Jr., Sanford E.

CLAIMS: 22

EXEMPLARY CLAIM: 12

DRAWING PAGES: 57

DRAWING FIGURES: 109

ART UNIT: 276

FULL TEXT: 6815 lines

ABSTRACT

An architecture that provides a server that communicates bidirectionally with a client over a first communication link, over which service requests flow to the server for one or more merchants and/or consumers is disclosed. Service requests are associated with a particular merchant based on storefront visited by a consumer or credentials presented by a merchant. Service requests result in merchant specific transactions that are

transmitted to the gateway for further processing on existing host applications. By presenting the appropriate credentials, the merchant could utilize any other computer attached to the Internet utilizing a SSL or SET protocol to query the server remotely and obtain capture information, payment administration information, inventory control information, audit information and process customer satisfaction information.

... certificate 1120. Payment gateway computer system 140 then decrypts digital signature 1125 to obtain a copy of the equivalent message digest calculated by merchant computer system 130 in function block 1020...

1/2,AB,KWIC/27 (Item 9 from file: 654)
DIALOG(R)File 654:US Pat.Full.
(c) format only 2000 The Dialog Corp. All rts. reserv.

02902430

Utility

COMPUTER-BASED COMMUNICATION SYSTEM AND METHOD USING METADATA DEFINING A CONTROL STRUCTURE

PATENT NO.: 5,862,325
ISSUED: January 19, 1999 (19990119)
INVENTOR(s): Reed, Drummond Shattuck, Seattle, WA (Washington), US (United States of America)
Heymann, Peter Earnshaw, Seattle, WA (Washington), US (United States of America)
Mushero, Steven Mark, Seattle, WA (Washington), US (United States of America)
Jones, Kevin Benard, Seattle, WA (Washington), US (United States of America)
Oberlander, Jeffrey Todd, Seattle, WA (Washington), US (United States of America)
Banay, Dan, Seattle, WA (Washington), US (United States of America)
ASSIGNEE(s): Intermind Corporation, (A U.S. Company or Corporation), Seattle, WA (Washington), US (United States of America)
APPL. NO.: 8-722,314
FILED: September 27, 1996 (19960927)

This application is a continuation-in-part of co-pending application Ser. No. 08-609,115, filed Feb. 29, 1996.

U.S. CLASS: 395-200.31 cross ref: 395-200.42; 395-200.58; 395-200.72; 395-200.74; 707-10; 707-203; 707-204
INTL CLASS: [6] G06F 17-30; G06F 17-40
FIELD OF SEARCH: 395-200.3.33; 395-200.42; 395-200.46.49; 395-200.57.59; 395-200.62; 395-200.72.74; 395-; 707-204; 707-203; 707-202; 707-201; 707-200; 707-103; 707-102; 707-101; 707-100; 707-10

References Cited

U.S. PATENT DOCUMENTS

4,274,139	6/1981	Hodgkinson et al.	395-200.33
4,432,057	2/1984	Daniell et al.	707-8
4,558,413	12/1985	Schmidt et al.	707-203

4,604,686	8/1986	Reiter et al.	395-500
4,714,992	12/1987	Gladney et al.	707-206
4,714,995	12/1987	Materna et al.	707-201
4,745,559	5/1988	Willis et al.	705-37
4,746,559	5/1988	Nishikawa	428-142
4,815,030	3/1989	Cross et al.	707-10
4,974,149	11/1990	Valenti	345-200.47
5,008,814	4/1991	Mathur	395-200.51
5,008,853	4/1991	Bly et al.	345-331
5,019,963	5/1991	Alderson et al.	707-201
5,133,075	7/1992	Risch	707-201
5,155,847	10/1992	Kirouac et al.	395-200.51
5,187,787	2/1993	Skeen et al.	395-680
5,220,657	6/1993	Bly et al.	711-152
5,226,161	7/1993	Khovi et al.	395-683
5,257,369	10/1993	Skeen et al.	395-680
5,287,504	2/1994	Carpenter et al.	707-201
5,303,379	4/1994	Khovi et al.	395-710
5,359,730	10/1994	Marron	395-712
5,404,488	4/1995	Kerrigan et al.	711-133
5,426,747	6/1995	Weinreb et al.	711-203
5,440,744	8/1995	Jacobson et al.	395-200.33
5,452,447	9/1995	Nelson et al.	707-205
5,473,772	12/1995	Halliwel et al.	395-712
5,485,370	1/1996	Moss et al.	395-200.47
5,491,820	2/1996	Belove et al.	707-3
5,495,610	2/1996	Shing et al.	395-200.51
5,497,491	3/1996	Mitchell et al.	395-683
5,499,343	3/1996	Pettus	395-200.33
5,515,508	5/1996	Pettus et al.	395-200.33
5,519,769	5/1996	Weinberger et al.	379-112
5,519,875	5/1996	Yokoyama et al.	395-683
5,528,490	6/1996	Hill	395-712
5,548,726	8/1996	Pettus	395-200.51
5,555,427	9/1996	Aoe et al.	395-200.31
5,557,793	9/1996	Koeber	707-103
5,560,012	9/1996	Ryu et al.	395-701
5,564,051	10/1996	Halliwel et al.	707-200
5,566,302	10/1996	Khalidi et al.	395-200.31
5,577,244	11/1996	Killebrew et al.	395-703
5,581,755	12/1996	Koeber et al.	707-103
5,581,761	12/1996	Radia et al.	395-702
5,581,764	12/1996	Fitzgerald et al.	395-703
5,586,311	12/1996	Davies et al.	707-1
5,586,326	12/1996	Ryu et al.	395-701
5,596,720	1/1997	Hamada et al.	395-200.36
5,596,746	1/1997	Shen et al.	707-101
5,600,834	2/1997	Howard	707-201
5,608,874	3/1997	Ogawa et al.	395-200.76
5,615,112	3/1997	Liu Sheng et al.	707-104
5,619,710	4/1997	Travis, Jr. et al.	395-200.33
5,623,656	4/1997	Lyons	707-10
5,623,661	4/1997	Hon	707-1
5,625,818	4/1997	Zarmer et al.	707-104
5,630,092	5/1997	Carreiro et al.	711-111
5,630,116	5/1997	Takaya et al.	707-201
5,634,010	5/1997	Ciscon et al.	395-200.33

5,640,564	6/1997	Hamilton et al.	395-683
5,644,764	7/1997	Johnson et al.	707-103
5,649,192	7/1997	Stucky	707-103
5,652,887	7/1997	Dewey et al.	395-683
5,668,997	9/1997	Lynch-Freshner et al.	395-683
5,673,322	9/1997	Pepe et al.	380-49
5,682,532	10/1997	Remington et al.	395-683
5,684,984	11/1997	Jones et al.	707-10
5,684,991	11/1997	Malcolm	707-204
5,689,708	11/1997	Regnier et al.	395-200.59
5,706,434	1/1998	Kremen et al.	395-200.48
5,710,918	1/1998	Lagarde et al.	707-10
5,721,911	2/1998	Ha et al.	707-100
5,761,677	6/1998	Senator et al.	707-203
5,761,678	6/1998	Bendert et al.	707-204

OTHER REFERENCES

C. Bowman, P. Danzig, D. Hardy, U. Manber, M. Schwartz & D. Wessels "Harvest: A Scalable, Customizable Discovery and Access System" Mar. 12, 1995.

D. Hardy & M. Schwartz "Customized Information Extraction as a Basis for Resource Discovery" Mar. 1994.

William G. Camargo "The Harvest Broker, " Dec. 1994.

D. Bulterman, G. van Rossum and R. van Liere "A Structure for Transportable, Dynamic Multimedia Documents" USENIX, Summer '91 Nashville, TN.

G. Almes and C. Holman "Edmas: An Object-Oriented, Locally Distributed Mail System "IEEE Transactions on Software Engineering, Sep. 1987.

G. Almes, A. Black, C. Bunie and Wiebe "Edmas: A Locally Distributed Mail System" IEEE, 1984.

W. Bender, H. Lie, J. Orwant, L. Teodosio, & N. Abramson "Newspace: Mass Media and Personal Computing," USENIX-Summer '91 -Nashville TN.

R. Thomas, H. Forsdick, T. Crowley, R. Schaaff, R. Tomlinson & V. Travers "Diamond: A Multimedia Message System Built on a Distributed Architecture" IEEE, Dec. 1994.

S. Ramanathan & P. V. Rangan "Architectures for Personalized Multimedia" IEEE, 1994.

N. Yankelovich, B. Haan, N. Meyrowitz & S. Drucker "Intermedia: The Concept and the Construction of a Seamless Information Environment" IEEE, Jan. 1988.

D. Woelk, W. Kim & W. Luther "An Object-Oriented Approach to Multimedia Database" ACM 1986.

N. Borenstein, C. Everhart, J. Rosenberg, A. Stoller "A Multi-media Message System for Andrew" USENIX Winter Conference Feb., 1988.

S. Jackson & N. Yankelovich "InterMail: A Prototype Hypermedia Mail System" Hypertext 91 Proceedings Dec. 1991.

E. Hoffert & G. Gretschi, "The Digital News System at Ed.ucom: A Convergence of Interactive Computing Newspaper, Television and High Speed Networks" Communications of the ACM Apr. 1991.

D. Crocker, E. Szurkowski & D. Farber "An Internetwork Memo Distribution Capability--MMDF" IEEE, ACM 1979.

Douglas Engelbart "Authorship Provisions in Augment" IEEE, 1984.

J.J. Garcia-Luna-Aceves "Towards Computer-Based Multimedia Information Systems" Computer Message Systems 85, 1986.

Debra P. Deutsch "Implementing Distribution Lists in Computer-Based Message Systems" Computer-Based Message Services, IFIP, 1984.

T. Purdy, D. Thorslund & N. Witchlow "Meridian SL Messaging" Computer Message Systems-85 IFIP, 1986.

Michael Tschichholz "Message Handling System: Requirements to the User Agent" Computer Message Systems-85, IFIP, 1986.

Lothar Wosnitza "Group Communication in the MHS Context" Computer Message Systems 85 IFIP, 1986.

Jacob Palme "Distribution Agents (mailing lists) in Message Handling Systems" Computer Message Systems 85 IFIP, 1986.

Teresa F. Lunt "A Model for Message System Security" Computer Message Systems 85 IFIP, 1986.

A. Roger Kaye "A User Agent for Multiple Computer-Based Message Services" Computer-Based Message Services, IFIP 1984.

Paul Wilson "Structure for Mailbox System Applications" Computer-Based Message Services, IFIP 1984.

J. Postel, G. Finn, A. Katz & J. Reynolds "The ISI Experimental Multimedia Mail System" Information Sciences Institute, Sep. 1986.

E. Moeller, A. Scheller & G. Schurmann "Distributed Processing of Multimedia Information" IEEE Computer Society Proceedings May 28-Jun. 1, 1990.

Richard L. Phillips "An Interpersonal Multimedia Visualization System" IEEE Computer Graphics & Applications IEEE 1991.

Jacob Palme "You Have 134 Unread Mail! Do You Want to Read Them Now?" Computer-Based Message Services IFIP, 1984.

Michael Caplinger "An Information System Based on Distributed Objects" OOPSLA '87 Proceedings.

M. Papa, G. Raguccini, G. Corrente, M. Ferrise, S. Giurleo and D. Vitale "The Development of an Object-Oriented Multimedia Information System" Lecture Notes in Computer Science, Sep. 1994.

Silvano Maffeis "A Flexible System Design to Support Object-Groups and Object-Oriented Distributed Programming" Lecture Notes in Computer Science, Jul. 1993.

R. Gotze, H. Eirund & R. Claassen "Object-Oriented Dialog Control for Multimedia User Interfaces" Lecture Notes in Computer Science-Human Computer Interaction Sep. 1993.

Chris Maeda "A Metaobject Protocol for Controlling File Cache Management" Lecture Notes in Computer Science, Mar. 1996.

A. Joseph, A. deLespinasse, J. Tauber, D. Gifford & M. Kaashoek "Rover" A Toolkit for Mobile Information Access SIGOPS '95 1995. ACM

Wolfgang Lux "Adaptable Object Migration: Concept and Implementation" Operating Systems Review Apr. 1995.

R. Campbell, N. Islam, R. Johnson, P. Kougiouris & P. Madany "Choices, Frameworks and Refinement" Department of Computer Science, University of Illinois, Dec. 1991.

Klemens Bohm & Thomas C. Rakow "Metadata for Multimedia Documents" SIGMOD Record, Vol. 23, No. 4, Dec. 1994.

Simon Gibbs "Compositional Multimedia and Active Objects" OOPSLA '91.

T. Purdin, R. Schlichting & G. Andrews "A File Replication Facility for Berkeley Unix" Software Practice and Experience, Vol. 17, Dec. 1987.

A. Black, N. Hutchinson, E. Jul & H. Levy "Object Structure in the Emerald System" OOPSLA '86 Proceedings.

Daniel T. Chang "Coral: A Concurrent Object-Oriented System for Constructing and Executing Sequential, Parallel and Distributed Applications" OOPS Messenger, Apr. 1991.

A. Birrell, G. Nelson, S. Owicki & E. Wobber "Network Objects" Proceedings of the 14th ACM Symposium on Operating Systems Principles, Dec. 5-8, 1993.

Jacques Ferber "Computational Reflection in Class based Object Oriented Languages" OOPSLA '89 Proceedings.

Michael Caplinger "An Information System Based on Distributed Objects" OOPSLA '87 Proceedings.

C. Fung & M. Pong "MOCS: an Object-Oriented Programming Model for Multimedia Object Communication and Synchronization" 1994 IEEE.

T. Hase & M. Matsuda "A New Audio-Visual Control Using Message Object Transmission", 1994 IEEE, Nov. 1994.

F. Horn & J. Stefani "On Programming and Supporting Multimedia Object Synchronization" The Computer Journal, Vol. 36, No. 1, 1993.

T. Little & A. Ghafoor Spatio-Temporal Composition of Distributed Multimedia Objects for Value-Added Networks, IEEE, 1991.

M. Vazirgiannis & C. Mourlas "An Object-Oriented Model for Interactive Multimedia Presentations" The Computer Journal, Vol. 36, No. 1, 1993.

T. Little & A. Ghafoor "Synchronization and Storage Models for Multimedia Objects" 1990 IEEE, Apr. 1990.

Cosmos Nicolaou "Architecture for Real-Time Multimedia Communications Systems", 1990 IEEE, Apr. 1990.

Ralf Steinmetz "Synchronization Properties in Multimedia Systems" 1990 IEEE, Apr. 1990.

T. Little & A. Ghafoor "Network Considerations for Distributed Multimedia Object Composition and Communication" 1990 IEEE Network Magazine, Nov. 1990.

K. Smith and S. Zdonik "Intermedia: A Case Study of the Differences Between Relational and Object-Oriented Database Systems" OOPSLA '87 Proceedings.

N. Yankelovich, B. Haan, N. Meyrowitz & S. Drucker "Intermedia: The Concept and the Construction of a Seamless Information Environment" Jan. 1988 IEEE.

S. Ramanathan & P. Rangan "Architectures for Personalized Multimedia" 1994 IEEE.

Marvin Sirbu and J. D. Tygar, "Netbill: An Internet Commerce system Optimized For Network-Delivered Services", IEEE Personal Communications Magazine, pp. 34-39, Aug. 1995.

Henrik Eriksson, "Expert System As Knowledge Servers", IEEE Expert Magazine, pp. 14-19, Jun. 1996.

Budi Yuwono and Dik Lun Lee, "Wise: A World Wide Web Resource Database System", IEEE Transactions on Knowledge and Data Engineering, Vol. 8, No. Aug. 1996.

H. Penny Nii "Blackboard Systems" The AI Magazine, Summer, 1986.

AppleShare, Apr. 1995.

"Manual Page for Unix NFS Mount Command".

"Manual Page for Unix FSTAB Command".

Phil Lapsley and Brian Kantor "Network News Transfer Protocol", Feb. 1986.

Brian Kantor and Phil Lapsley, Network News Transfer Protocol, "A Proposed Standard for the Stream-Based Transmission of News", Feb. 1986.

M. Crispin "Network Working Group", University of Washington, Dec. 1996.

Terry Gray Comparing Two Approaches to Remote Mailbox Access: IMAP vs. POP, University of Washington.

Terry Gray "Message Access Paradigms and Protocols", University of Washington, Aug. 1995.

PRIMARY EXAMINER: Lim, Krisna
ASST. EXAMINER: Barot, Bharat
ATTORNEY, AGENT, OR FIRM: Wolf, Greenfield & Sacks, PC
CLAIMS: 126
EXEMPLARY CLAIM: 1
DRAWING PAGES: 47
DRAWING FIGURES: 57
ART UNIT: 278
FULL TEXT: 8804 lines

ABSTRACT

An automated communications system operates to transfer data, metadata and methods from a provider computer to a consumer computer through a communications network. The transferred information controls the communications relationship, including responses by the consumer computer, updating of information, and processes for future communications. Information which changes in the provider computer is automatically updated in the consumer computer through the communications system in order to maintain continuity of the relationship. Transfer of metadata and methods permits intelligent processing of information by the consumer computer and combined control by the provider and consumer of the types and content of information subsequently transferred. Object oriented processing is used for storage and transfer of information. The use of metadata and methods further allows for automating many of the actions underlying the communications, including communication acknowledgements and archiving of information. Service objects and partner servers provide specialized data, metadata, and methods to providers and consumers to automate many common communications services and transactions useful to both providers and consumers. A combination of the provider and consumer programs and databases allows for additional functionality, including coordination of multiple users for a single database.

...scheduled event loop of the consumer or provider program.

FIG. 17 illustrates the object oriented database structures for different communications object types.

FIG. 18 illustrates object oriented data structures used for distribution control.

FIG...

... information contained in the provider database can be transferred and used in communications relationships with different consumers. The provider database includes information associating the information with each potential recipient. The association information is used to...

... to the existing information to determine what has been updated. The consumer program maintains a database of information from different providers. When updated information is received, the consumer program executes instructions associated with the information...

... to be sent). Recipients 120 have an association with methods 141 in order to allow different methods to be assigned to different recipients. An example is the communications object's update...user via preference forms or even direct HTML source editing. Such preferences may allow a different default startup menu screen, different toolbars, different

menu choices on any given screen, different screen fonts or backgrounds, and other display or operational preferences.

The first five choices on...of the type definition 144 for each required or desired attribute to automatically identify and copy these attributes from elements 143 in the provider database 11 to elements 143 in the directory partner...

1/2,AB,KWIC/28 (Item 10 from file: 654)
DIALOG(R)File 654:US Pat.Full.
(c) format only 2000 The Dialog Corp. All rts. reserv.

02872693

Utility

DISTRIBUTED DATABASE MANAGEMENT SYSTEM FOR SERVICING APPLICATION REQUESTS
IN A TELECOMMUNICATIONS SWITCHING SYSTEM

PATENT NO.: 5,835,757
ISSUED: November 10, 1998 (19981110)
INVENTOR(s): Oulid-Aissa, Mourad, Boca Raton, FL (Florida), US (United States of America)
Cole, Charles Allen, Coral Springs, FL (Florida), US (United States of America)
Tavanyar, Simon Edwin, Altamonte Springs, FL (Florida), US (United States of America)
ASSIGNEE(s): Siemens Telecom Networks, (A U.S. Company or Corporation), Boca Raton, FL (Florida), US (United States of America)
APPL. NO.: 8-502,949
FILED: July 17, 1995 (19950717)

CROSS-REFERENCE TO RELATED APPLICATION

This is a continuation of Ser. No. 08-220,992 filed Mar. 30, 1994, now abandoned.

U.S. CLASS: 707-10 cross ref: 395-200.31; 395-200.73
INTL CLASS: [6] G06F 17-30
FIELD OF SEARCH: 395-200.3; 395-610; 395-614; 395-200.1; 395-608; 395-618

References Cited

U.S. PATENT DOCUMENTS

4,635,189	1/1987	Kendall	395-601
4,714,995	12/1987	Materna et al.	395-601
4,769,722	9/1988	Dwyer	395-610
4,769,772	9/1988	Dwyer	264-617
4,774,661	9/1988	Kumpati	364-DIG.1
4,972,367	11/1990	Burke	395-601
5,058,000	10/1991	Cox et al.	395-610
5,185,887	2/1993	Takahashi et al.	395-601
5,193,110	3/1993	Jones et al.	379-94
5,278,978	1/1994	Demers et al.	395-601
5,329,626	7/1994	Klein et al.	395-375
5,345,587	9/1994	Fehskens et al.	395-375
5,375,234	12/1994	Davidson et al.	395-600

5,377,309	12/1994	Sonobe et al.	395-76
5,377,350	12/1994	Skinner	395-600
5,379,424	1/1995	Morimoto et al.	395-600
5,388,258	2/1995	Larsson et al.	395-601
5,402,474	3/1995	Miller et al.	379-93
5,423,037	6/1995	Hvasshovd	395-601
5,448,634	9/1995	Satomi et al.	379-220
5,469,503	11/1995	Butensky et al.	379-265
5,561,797	10/1996	Gilles et al.	395-608
5,574,904	11/1996	Yunoki et al.	395-601

NON-U.S. PATENT DOCUMENTS

490 465 6/1972 EP (European Patent Office)

OTHER REFERENCES

"DODBMS/CIM: A Distributed Object-Oriented Database Management System for CIM Applications", Wang Guoren et al., Dept. of Computer Science, Northeast University, China, TENCON '93--1993 IEEE Region 10 Conference on Computers, Communication, Mar. 1993.

An Interactive Graphics Editor, With Integrated Data Dictionary for IDEF sub o Structured Analysis Diagrams, Hartrum, et al., IEEE, Apr. 1988, pp. 765-770.

"Transaction Management in the R* Distributed Database Management System", C. Mohan, et al. ACM Transactions on Database Systems, vol. 11, No. 4, Dec. 1986, pp.378-396.

"A Taxonomy and Current Issues in Multidatabase Systems", M.W. Bright et al., IEEE Computer, Mar. 1992, pp. 50-59.

"Introduction to a System for Distributed Databases (SDD-1)", J.B. Rothnie, Jr. et al., ACM Transactions on Database Systems, vol. 5, No. 1, Mar. 1980, pp. 1-17.

"Application Program Interface Design Based on On-Line Processing Types", Nakatani et al., IEEE, Apr. 1992, pp. 517-524.

"An Interface for Rapid Prototyping and Evolutionary Support of Database-Intensive Applications", Kevin Lynch et al., IEEE, Jun. 1989, pp. 344-348.

"A Dynamic and Integrated Concurrency Control for Distributed Databases", J. Pons et al., IEE Journal of Selected Areas in Communications, vol. 7, No. 3, Apr. 1989, pp. 364-374.

"Modular Synchronization in Distributed, Multiversion Databases: Version Control and Concurrency Control", Agrawal et al., IEEE Transactions on Knowledge and Data Engineering, vol. 5, No. 1, Feb. 1993, pp. 126-137.

"Four References Architectures for Distributed Database Management Systems", James A. Larson, Computer Standards and Interfaces vol. 9, No. 3, Jan. 1, 1989, pp. 209-221.

PRIMARY EXAMINER: Amsbury, Wayne
ASST. EXAMINER: Alam, Hosain T.
ATTORNEY, AGENT, OR FIRM: Codispoti, Joseph S.
CLAIMS: 6
EXEMPLARY CLAIM: 1
DRAWING PAGES: 16
DRAWING FIGURES: 19
ART UNIT: 237
FULL TEXT: 1846 lines

ABSTRACT

A distributed database management (DDBMS) system for switching applications that combines rapid feature deployment with high real-time performance. The system architecture encompasses a new software boundary between application and database, yet provides the benefits of open standard interfaces and distributed transaction control. To accomplish this dichotomy, an object-oriented schema is used to arrange the DDBMS as an intelligent service provider, separating services from physical location and implementation. A software containment approach is utilized to optimize interfaces based on grouping of data so as to permit application-specific routines to be "plugged-into" the database. The DDBMS is arranged to address extendibility and real-time performance needs of capabilities such as ISDN and IN is switching offices and network nodes.

... nodes without impacting the client applications. Fragmentation and copy transparencies allow for the changing of different database partitions over time without impact on the client applications. ...the users of that service and are optimized to the users requirements. DGWs providing service database access functions are different routines to different users. For example, to Call Processing, they might be real-time efficient...the session working area and copy them into the requestor's buffer. The SET commands copy attributes from the requestor's buffer into the session working area.

3. Announce ending of access...read, write and search the physical database including separate access to the each of the different levels of the physical database hierarchy.

The users of these data agents include the following functional areas of the database...

1/2,AB,KWIC/29 (Item 11 from file: 654)
DIALOG(R)File 654:US Pat.Full.
(c) format only 2000 The Dialog Corp. All rts. reserv.

02869111

Utility

USING CANONICAL FORMS TO DEVELOP A DICTIONARY OF NAMES IN A TEXT
[Data structure in a memory of a computer]

PATENT NO.: 5,832,480
ISSUED: November 03, 1998 (19981103)
INVENTOR(s): Byrd, Jr. Roy Jefferson, Ossining, NY (New York), US (United

States of America)
Choi, Misook A., Mt. Kisco, NY (New York), US (United States of America)
Ravin, Yael, Mt. Kisco, NY (New York), US (United States of America)
Wacholder, Faye Nina, Roslyn Heights, NY (New York), US (United States of America)
ASSIGNEE(s): International Business Machines Corporation, (A U.S. Company or Corporation), Armonk, NY (New York), US (United States of America)
[Assignee Code(s): 42640]
APPL. NO.: 8-678,929
FILED: July 12, 1996 (19960712)
U.S. CLASS: 707-5 cross ref: 704-2; 704-8; 704-9; 704-10; 707-1; 707-532; 707-536
INTL CLASS: [6] G06F 17-30
FIELD OF SEARCH: 707-1; 707-5; 707-532; 707-536; 704-9; 704-10; 704-2; 704-8

References Cited

U.S. PATENT DOCUMENTS

4,864,501	9/1989	Kucera et al.	704-8
4,868,750	9/1989	Kucera et al.	704-8
5,287,278	2/1994	Rau	
5,510,981	4/1996	Berger et al.	704-2

OTHER REFERENCES

"NameFinder: Software that finds Names in Text" by Phil Hayes, pp. 762-774 from RIAO 94, Conference Proceedings, Intelligent Multimedia Information Retrieval Systems and Management, Rockefeller Univ. New York, NY, vol. 1. Web Pages for NameTag at <http://projects.sra.com/nametag>.

D. D. McDonald, "Internal and External Evidence in the Identification and Semantic Categorization of Proper Names," in B. Boguraev and J. Pustejovsky, eds. Acquisition of Lexical Knowledge from Text: Proceedings of a Workshop Sponsored by the special interest Group on the Lexicon of the Association for Computational Linguistics, pp. 32-43, Columbus, Ohio, 1993.

W. Paik, E.D. Liddy, E. Yu and M. McKenna, "Categorizing and standardizing Proper Nouns for efficient information Retrieval," in B. Boguraev and J. Pustejovsky, eds. Acquisition of Lexical Knowledge from Text: Proceedings of a Workshop Sponsored by the Special Interest Group on the Lexicon of the Association for Computational Linguistics, 154-160, Columbus, Ohio, 1993.

W. B. Frakes and R. Baeza-Yates, Information Retrieval: Data Structures and Algorithms, Prentice Hall, 1992, pp. 106-109, 113-116, 138-142.

B. W. Kernighan and D. M. Ritchie, The C Programming Language, 2nd Edition, PTR Prentice Hall, Englewood Cliffs, New Jersey, 1988, pp. 152-153, 249-250.

P. Hayes, "NameFinder: Software that finds Names in Text", Proceedings of RIAO '94, vol. 1, pp. 762-774, Oct. 1994, New York. ISBN 2-905450-05-3.

S. Coates-Stephens, "The Analysis and Acquisition of Proper Names for the Understanding of Free Text," Computers and the Humanities, Vold. 26, pp. 441-456, 1993.

PRIMARY EXAMINER: Lintz, Paul R.
ASST. EXAMINER: Colbert, Ella A.
ATTORNEY, AGENT, OR FIRM: Percello, Louis J.
CLAIMS: 17
EXEMPLARY CLAIM: 1
DRAWING PAGES: 29
DRAWING FIGURES: 35
ART UNIT: 271
FULL TEXT: 1470 lines

ABSTRACT

Descriptive canonical forms of entity types are created by scanning one or more documents in a database of a computer system to identify one or more proper names that appear in the documents as raw names. Each of the raw names has zero or more proper names, zero or more medial substrings, zero or more leading substrings, and zero or more trailing substrings. The raw names of one or more documents are "cleaned" and "split" until certain "cleaning and splitting conditions" are no longer met to obtain a list of clean and split candidate names. Anchor names are selected from the list that unambiguously represent an entity type. The anchor names have one or more entity-type attribute values. Variant names, clean and split candidate names having one or more shared attribute (values) with the anchor name, are combined with the anchor name to create an equivalence group of names that refer to the same entity. A canonical form is generated for the group from a subset of the anchor name attributes. A canonical form is created in this manner for all of the clean and split candidate names on the list.

...partial solutions.

Some prior art identifies names in text and their variants based on a database of known names. The different variants may be explicitly listed in the database, or they may be recognized if they...
... could be assigned a certain entity type. The analysis is carried out on a "working copy" of the str attribute. The working copy starts as an exact copy of the str value, but as substrings of it (from...the name-suffix attribute 1719 are null, as they were not found in the working copy of the str attribute. The last-name attribute value 1718 is "Smith".

Finally, name element 1720 returned from the...

1/2,AB,KWIC/30 (Item 12 from file: 654)
DIALOG(R)File 654:US Pat.Full.
(c) format only 2000 The Dialog Corp. All rts. reserv.

02854848

Utility
PROCESSING NAMES IN A TEXT

PATENT NO.: 5,819,265
ISSUED: October 06, 1998 (19981006)
INVENTOR(s): Ravin, Yael, Mt. Kisco, NY (New York), US (United States of America)
Choi, Misook A., Mt. Kisco, NY (New York), US (United States of America)
Wacholder, Faye Nina, Roslyn Heights, NY (New York), US (United States of America)
ASSIGNEE(s): International Business Machines Corporation, (A U.S. Company or Corporation), Armonk, NY (New York), US (United States of America)
[Assignee Code(s): 42640]
APPL. NO.: 8-678,849
FILED: July 12, 1996 (19960712)
U.S. CLASS: 707-5 cross ref: 704-2; 704-8; 704-9; 704-10; 707-1; 707-532; 707-536
INTL CLASS: [6] G06F 17-30
FIELD OF SEARCH: 707-5; 707-1; 707-532; 707-536; 704-2; 704-8; 704-9; 704-10

References Cited

U.S. PATENT DOCUMENTS

4,864,501	9/1989	Kucera et al.	704-8
4,868,750	9/1989	Kucera et al.	704-8
5,287,278	2/1994	Rau	364-419.1
5,383,121	1/1995	Latkeman	704-9
5,510,981	4/1996	Berger et al.	704-2

OTHER REFERENCES

P. Hayes, "NameFinder: Software that finds Names in Text", Proceedings of RIAO '94, vol. 1, pp. 762-774, Oct. 1994, New York. ISBN 2-905450-05-3.

Web pages for Name Tag at [Http: // projects.sra.com/nametag](http://projects.sra.com/nametag).

S. Coates-Stephens, "The Analysis and Acquisition of Proper Names for the Understanding of Free Text," Computers and the Humanities, vol. 26, pp. 441-456, 1993.

D. D. McDonald, "Internal and External Evidence in the Identification and Semantic categorization of Proper Names," in B. Boguraev and J. Pustejovsky, eds. Acquisition of Lexical Knowledge from Text: Proceedings of a Workshop Sponsored by the special interest Group on the Lexicon of the Association for Computational Linguistics, pp. 32-43, Columbus, Ohio, 1993.

W. Paik, E.D. Liddy, E. Yu and M. McKenna, "Categorizing and standardizing Proper Nouns for efficient information Retrieval, " in B. Boguraev and J. Pustejovsky, eds. Acquisition of Lexical Knowledge from Text: Proceedings of a Workshop Sponsored by the Special Interest Group on the Lexicon of the Association for Computational Linguistics, 154-160, Columbus, Ohio, 1993.

W. B. Frakes and R. Baeza-Yates, Information Retrieval: Data Structures and Algorithms, Prentice Hall, 1992, pp. 106-109, 113-116, 138-142.

B. W. Kernighan and D. M. Ritchie, The C. Programming Language, 2nd Edition, PTR Prentice Hall, Englewood Clifs, New Jersey. 1988, pp. 152-153, 249-250.

"NameFinder; Software that finds Names in Text" by Phil Hayes, pp. 762-774 from RIAO 94, Conference Proceedings, Intelligent Multimedia Information Retrieval Systems and Management, Rockefeller Univ. New York, NY, vol. 1.

PRIMARY EXAMINER: Lintz, Paul R.
ASST. EXAMINER: Colbert, Ella
ATTORNEY, AGENT, OR FIRM: Percello, Louis J.
CLAIMS: 16
EXEMPLARY CLAIM: 1
DRAWING PAGES: 29
DRAWING FIGURES: 35
ART UNIT: 271
FULL TEXT: 1471 lines

ABSTRACT

Occurrences of proper names in text are identified by scanning one or more documents in a database of a computer system to identify one or more sequences of capitalized words and other specially defined words that appear in the documents as raw names. Each of the raw names has zero or more proper names, zero or more medial substrings, zero or more leading substrings, and zero or more trailing substrings. The raw names of one or more documents are "cleaned" and "split" until certain "cleaning and splitting conditions" are no longer met to obtain a list of clean and split candidate names.

...partial solutions.

Some prior art identifies names in text and their variants based on a database of known names. The different variants may be explicitly listed in the database, or they may be recognized if they...
... could be assigned a certain entity type. The analysis is carried out on a "working copy " of the str attribute . The working copy starts as an exact copy of the str value, but as substrings of it (from...the name-suffix attribute 1719 are null, as they were not found in the working copy of the str attribute . The last-name attribute value 1718 is "Smith".

Finally, name element 1720 returned from the...

1/2,AB,KWIC/31 (Item 13 from file: 654)
DIALOG(R)File 654:US Pat.Full.
(c) format only 2000 The Dialog Corp. All rts. reserv.

02836917

Utility
METHOD AND APPARATUS FOR GENERATING A PROPOSAL RESPONSE

PATENT NO.: 5,802,493
ISSUED: September 01, 1998 (19980901)
INVENTOR(s): Sheflott, Leonard J., Avon, CT (Connecticut), US (United

States of America)
Wildeman, Marion A., Glastonbury, CT (Connecticut), US (United States of America)
Aleguas, III, Salvador, Martinez, CA (California), US (United States of America)
Murgo, Joseph L., Manchester, MO (Missouri), US (United States of America)
Jordan, Pamela Lane, East Hampton, CT (Connecticut), US (United States of America)
Gregory, Jill Matus, Westbrook, CT (Connecticut), US (United States of America)
Pincavage, Carole A., Glastonbury, CT (Connecticut), US (United States of America)
Cipriani, Anthony, Middletown, CT (Connecticut), US (United States of America)
Goldman, Robert, South Windsor, CT (Connecticut), US (United States of America)

ASSIGNEE(s): Aetna Life Insurance Company, (A U.S. Company or Corporation),
Hartford, CT (Connecticut), US (United States of America)

APPL. NO.: 8-350,949

FILED: December 07, 1994 (19941207)

U.S. CLASS: 705-1

INTL CLASS: [6] G06C 17-60

FIELD OF SEARCH: 395-201; 395-793; 395-759; 395-604; 395-615

References Cited

U.S. PATENT DOCUMENTS

4,766,539	8/1988	Fox	364-401
4,831,526	5/1989	Luchs et al.	364-401
4,975,840	12/1990	DeTore et al.	364-401
5,224,206	6/1993	Simoudis	
5,463,768	10/1995	Cuddihy et al.	395-183.13

OTHER REFERENCES

RFP(c) ; A/E Management Services, Inc. Version 7.2 April., 1994.

PRIMARY EXAMINER: Hayes, Gail O.
ASST. EXAMINER: Hughes, William
ATTORNEY, AGENT, OR FIRM: McCormick, Paulding & Huber
CLAIMS: 14
EXEMPLARY CLAIM: 1
DRAWING PAGES: 11
DRAWING FIGURES: 15
ART UNIT: 241
FULL TEXT: 1403 lines

ABSTRACT

A system for generating a document in response to a request for information has the capability of receiving scanned documents that have a series of questions. The present invention has databases of questions and associated

answers. A respondent prepares the subject questions for a searching procedure by editing and assigning each question with a number and labels the same with given input parameters. The system searches the question database for a question which exactly matches the subject question or is a like match in that it is similar in text or input parameter value. The system compares each received question with stored questions and return similarly worded questions in accordance with a predetermined match threshold. The respondent may then select an answer associated with the subject question for inclusion in the response document. The present system is also characterized by a maintenance apparatus that allows for systematic upkeep of question and answer databases.

... protected item. If the question or answer has been revised (already present in the appropriate database) a different process is executed. An unprotected item is first created with all of the updated attributes...
...all questions associated with said selected answer;
editing said text or a value of said attributes , producing edited work copy signals;
replace said question or answer database signals corresponding to said question or answer with...

1/2,AB,KWIC/32 (Item 14 from file: 654)
DIALOG(R)File 654:US Pat.Full.
(c) format only 2000 The Dialog Corp. All rts. reserv.

02797603

Utility

DISTRIBUTED DATABASE ARCHITECTURE AND DISTRIBUTED DATABASE MANAGEMENT
SYSTEM FOR OPEN NETWORK EVOLUTION

PATENT NO.: 5,764,977
ISSUED: June 09, 1998 (19980609)
INVENTOR(s): Oulid-Aissa, Mourad, Boca Raton, FL (Florida), US (United States of America)
Cole, Charles Allen, Coral Springs, FL (Florida), US (United States of America)
Tavanyar, Simon Edwin, Altamonte Springs, FL (Florida), US (United States of America)
ASSIGNEE(s): Siemens Stromberg-Carlson, (A U.S. Company or Corporation),
Boca Raton, FL (Florida), US (United States of America)
APPL. NO.: 8-501,590
FILED: July 12, 1995 (19950712)

CROSS REFERENCE TO RELATED APPLICATION

This is a continuation of Ser. No. 08-220,994 filed Mar. 30, 1994 and now abandoned.

U.S. CLASS: 707-10 cross ref: 379-220; 707-1; 707-2; 707-4; 707-5; 707-101
; 707-102
INTL CLASS: [6] G06F 17-30
FIELD OF SEARCH: 395-600; 395-650; 395-575; 395-800; 395-614; 395-601;
395-602; 395-604; 395-605; 395-610; 395-613; 395-612; 364-900;
379-93; 379-220

References Cited

U.S. PATENT DOCUMENTS

4,769,772	9/1988	Dwyer	364-300
4,774,661	9/1988	Kumpati	395-600
4,972,367	11/1990	Burke	364-900
5,058,000	10/1991	Cox et al.	364-200
5,278,978	1/1994	Demer et al.	395-600
5,329,626	7/1994	Klein et al.	395-375
5,379,424	1/1995	Morimoto et al.	395-600
5,388,258	2/1995	Larsson et al.	395-600
5,402,474	3/1995	Miller et al.	379-93
5,448,634	9/1995	Satomi et al.	379-220
5,469,503	11/1995	Butensky et al.	379-265

NON-U.S. PATENT DOCUMENTS

490 465 6/1992 EP (European Patent Office)

OTHER REFERENCES

Kevin Lynch et al., "An interface for rapid prototyping and evolutionary support of database-intensive application", IEEE, Dec. 1992, pp. 344-348.

Nakatari et al., "Application program interface design based on On-line processing types", IEEE Dec. 1992, pp. 517-524.

Hartrum et al., "An interactive graphics editor with integrated data dictionary for IDEF structured analysis diagram", IEEE, Dec. 1988, pp. 765-770.

"Four References Architectures for Distributed Database Management Systems", James A. Larson, Computer Standards and Interfaces vol. 9, No. 3, Jan. 1, 1989, pp. 209-221.

PRIMARY EXAMINER: Black, Thomas G.

ASST. EXAMINER: Lewis, Cheryl R.

ATTORNEY, AGENT, OR FIRM: Codispoti, Joseph S.

CLAIMS: 6

EXEMPLARY CLAIM: 1

DRAWING PAGES: 16

DRAWING FIGURES: 19

ART UNIT: 237

FULL TEXT: 1976 lines

ABSTRACT

A distributed database management (DDBMS) system for switching applications that combines rapid feature deployment with high real-time performance. The system architecture encompasses a new software boundary between application and database, yet provides the benefits of open standard interfaces and distributed transaction control. To accomplish this dichotomy, an object-oriented schema is used to arrange the DDBMS as an intelligent service provider, separating services from physical location and

implementation. A software containment approach is utilized to optimize interfaces based on grouping of data so as to permit application-specific routines to be "plugged-into" the database. The DDBMS is arranged to address extendibility and real-time performance needs of capabilities such as ISDN and IN is switching offices and network nodes.

... nodes without impacting the client applications. Fragmentation and copy transparencies allow for the changing of different database partitions over time without impact on the client applications. The layering is discussed with reference...the users of that service and are optimized to the users requirements. DGWs providing service database access functions are different routines to ...the session working area and copy them into the requestor's buffer. The SET commands copy attributes from the requestor's buffer into the session working area.

3. Announce ending of access...read, write and search the physical database including separate access to the each of the different levels of the physical database hierarchy.

The users of these data agents include the following functional areas of the database...

1/2,AB,KWIC/33 (Item 15 from file: 654)
DIALOG(R)File 654:US Pat.Full.
(c) format only 2000 The Dialog Corp. All rts. reserv.

02794139

Utility

DISTRIBUTED DATA BASE SYSTEM

PATENT NO.: 5,761,672
ISSUED: June 02, 1998 (19980602)
INVENTOR(s): Samuelsson, Bo Mikael, Stockholm, SE (Sweden)
Bjornerstedt, Anders, Danderyd, SE (Sweden)
ASSIGNEE(s): Telefonaktiebolaget LM Ericsson, (A Non-U.S. Company or Corporation), Stockholm, SE (Sweden)
[Assignee Code(s): 27980]
APPL. NO.: 8-384,733
FILED: February 07, 1995 (19950207)
PRIORITY: 9400410, SE (Sweden), February 8, 1994 (19940208)
U.S. CLASS: 707-104 cross ref: 707-100
INTL CLASS: [6] G06F 17-30
FIELD OF SEARCH: 395-200; 395-600; 395-650; 395-700; 395-601; 395-611;
395-612; 395-613; 395-614; 395-615; 395-616; 364-280.6;
364-280.9

References Cited

U.S. PATENT DOCUMENTS

4,901,231	2/1990	Bishop et al.	
4,980,822	12/1990	Brantley	
5,187,790	2/1993	East et al.	
5,247,673	9/1993	Costa et al.	
5,280,612	1/1994	Lorie et al.	395-600
5,428,782	6/1995	White	395-650

5,442,791	8/1995	Wrabetz et al.	395-650
5,560,005	9/1996	Hoover et al.	395-600

NON-U.S. PATENT DOCUMENTS

397 644	9/1990	EP (European Patent Office)
405 829	1/1991	EP (European Patent Office)
497 600	8/1992	EP (European Patent Office)

OTHER REFERENCES

"Principles of Distributed Database Systems", M.T. Ozsu et al., Prentice-Hall, 1993, pp. 510-511.

PRIMARY EXAMINER: Black, Thomas G.

ASST. EXAMINER: Ho, Ruay Lian

ATTORNEY, AGENT, OR FIRM: Burns, Doane, Swecker & Mathis, L.L.P.

CLAIMS: 4

EXEMPLARY CLAIM: 1

DRAWING PAGES: 7

DRAWING FIGURES: 20

ART UNIT: 237

FULL TEXT: 839 lines

ABSTRACT

In a distributed data base system, different parts of the data base are handled by each of a number of interconnected processors. The different data base parts contain a number of data entities. There are provided for each of such data entities global information relating to the processor in which the data entity is located, and local information relating to the location of the data entity in the own processor. The global information is located in each processor in the system in the form of global information common to and specific for each set of data entities. More particularly, the sets of data entities comprise distribution entities each of which includes information relating to a number of instances of a certain type of data entity located in a certain processor, and information by which the address to this processor can be found.

ABSTRACT

In a distributed data base system, different parts of the data base are handled by each of a number of interconnected processors. The different data base parts contain a number of data entities. There are provided for each of such data...

BACKGROUND

The present invention generally relates to a distributed data base system in which different parts of a data base are handled by one each of a number of interconnected processors, the different data base parts containing a number of data entities.

More particularly the invention relates to data base...a first aspect of the invention the above objects have been attained in a distributed data base system in which different parts of a database are handled by one

each of a number of interconnected processors. The different database parts include a number of data entities. For each such data entity there is global...to the data entity and an identification number for the class in question. In said data base system different parts of a database are handled by one each of a number of interconnected processors. The different database parts contain a number of data entities of the kind just referred to above, and...base system, a data entity belonging to a specific class of data entities. In said data base system different parts of a database are handled by one each of a number of interconnected processors. The different database parts contain a number of data entities of the kind just referred to above, and...stated objects are attained, according to the invention, by a distribution entity in a distributed database system, in which different parts of a data base are handled by each of a number of interconnected processors. Said different database parts contain a number of data entities. Said distribution entity includes information regarding a number...

... stated objects are attained, according to the invention, by a distribution entity in a distributed database system, in which different parts of a database are handled by each of a number of interconnected processors. Said different database parts contain a number of data entities. Said distribution entity includes information common and specific a distributed database system, in which different parts of a database are handled by each of a number of interconnected processors. The different database parts contain a number of data entities. Said identity entity includes first information regarding a...

... the processor 54 a copy 66" of the object 66', the user process 52 accessing attributes in the copy 66", indicated by an arrow 72', by means of the agent object 70. This will...

... distributed database system including a data base, and a number of interconnected processors for handling different parts of said data base, said data base parts including a number of data entities, each such data entity having... distributed database system, including a data base, and a number of interconnected processors for handling different parts of said data base, said data base parts including a number of data entities, each such data entity having... distributed database system, including a data base, and a number of interconnected processors for handling different parts of said data base, said data base parts including a number of data entities, each such data entity having...

1/2,AB,KWIC/34 (Item 16 from file: 654)
DIALOG(R) File 654:US Pat.Full.
(c) format only 2000 The Dialog Corp. All rts. reserv.

02783758

Utility

SPECTRALLY COORDINATED PATTERN SEARCH-IMAGING SYSTEM AND METHOD

PATENT NO.: 5,751,829

ISSUED: May 12, 1998 (19980512)

INVENTOR(s): Ringland, William K., Walnut, CA (California), US (United States of America)
Kubo, Jon C., Walnut, CA (California), US (United States of America)

ASSIGNEE(s): Autodesk, Inc, (A U.S. Company or Corporation), San Rafael, CA (California), US (United States of America)

APPL. NO.: 8-292,514
FILED: August 18, 1994 (19940818)
U.S. CLASS: 382-100 cross ref: 355-79
INTL CLASS: [6] G06K 9-00
FIELD OF SEARCH: 355-79; 395-600; 395-151; 395-152; 395-153; 395-154;
395-125; 395-126; 395-127; 395-128; 395-129; 395-173; 382-162;
358-518; 364-474.23; 364-474.24

References Cited

U.S. PATENT DOCUMENTS

4,046,476	9/1977	Charamella et al.	355-77
4,931,929	6/1990	Sherman	364-401
5,222,154	6/1993	Graham et al.	382-162
5,241,671	8/1993	Reed et al.	395-600
5,414,537	5/1995	Omuro et al.	358-518
5,458,590	10/1995	Schleinz et al.	604-361
5,493,518	2/1996	Keating	364-578
5,495,568	2/1996	Beavin	395-173
5,495,576	2/1996	Ritchey	395-125
5,524,195	6/1996	Clanton, III et al.	395-173
5,563,988	10/1996	Maes et al.	395-121
5,572,635	11/1996	Takizawa et al.	382-167
5,577,175	11/1996	Naka et al.	395-173

NON-U.S. PATENT DOCUMENTS

2 105 075 3/1983 GB (United Kingdom)

OTHER REFERENCES

Article--ColorTec-PCM (Personal Color Meter) of ColorTec Associates, Inc.

Cavanagh, R.T., "Educational/Institutional Features of the Optical Videodisc System", SMPTE Journal, vol. 86, No. 4, Apr. 1977, pp. 201-203.

Riggs, L., Direct Marketing Goes Electronic:, Sales & Marketing Mgmt., vol. 134, No. 1, Jan. 14, 1985, pp. 59-60.

Hoke, P., "Comp-U-Store System Could Change Retail Economics", Direct Marketing, vol. 46, No. 3, Jul. 1983, pp. 101-107.

Gatty, B., "Setting up Shop on Computer Screens", Nation's Business, vol., 72, No. 3, Mar. 1984, pp. 57-58.

"Retailer Beginning to Tune in Video Displays", Advertising Age, Nov. 18, 1985, p 66.

"Videodisc: Product Search Launched for Architects and Interior Designers", Videodisc and Optical Disk, vol. 5, No. 4, Jul./Aug. 1985, pp. 244-247.

Merrian, M. Suzanne, et al., "An Interactive Videodisc for Visitor Information", published by Learned Information, Inc., Medford, New Jersey, 1984, pp. 195-207.

PRIMARY EXAMINER: Razavi, Michael T.
ASST. EXAMINER: Patel, Jayanti K.
ATTORNEY, AGENT, OR FIRM: Merchant, Gould, Smith, Edell, Welter & Schmidt
CLAIMS: 41
EXEMPLARY CLAIM: 1
DRAWING PAGES: 12
DRAWING FIGURES: 12
ART UNIT: 266
FULL TEXT: 1571 lines

ABSTRACT

A system for selecting decorative materials is based on large numbers of high-resolution, full color images of decorative materials stored in a compressed format on an inexpensive medium such as a CD-ROM. In creating the ROM, each image is coordinated with additional information such as style of pattern, type of material, and other auxiliary information. Before final compression and storage of the image data color information is added by spectrophotometrically analyzing the decorative material. Color values for a background color and up to four foreground colors are determined. Individual colors are then referenced to a comprehensive color standard system containing a large number of standardized color swatches. Spectrophotometric color referencing allows the data records to be rapidly searched on the basis of color, as well as the other information in the record. Wallpaper patterns, drapery material, floor covering, or paint can then be rapidly selected on the basis of matching color. Various patterns and paints can be compared side by side on a high-resolution computer monitor that has been calibrated to produce an accurate color image. Finally, the chosen paints and other decorating materials can be rendered onto a room image so that the consumer can view an accurate simulation of the chosen materials.

... reference system, virtually any color can be matched. Then any person with access to a copy of the reference system can look up a given swatch number and see how the...

... is a good choice for use with the present invention. The Pantone system has 1701 different swatches in a set, thus allowing virtually any color to be matched.

Most decorative materials...

1/2,AB,KWIC/35 (Item 17 from file: 654)
DIALOG(R) File 654:US Pat.Full.
(c) format only 2000 The Dialog Corp. All rts. reserv.

02751221

Utility
DISTRIBUTED DATABASE ARCHITECTURE AND DISTRIBUTED DATABASE MANAGEMENT
SYSTEM FOR OPEN NETWORK EVOLUTION

PATENT NO.: 5,721,909
ISSUED: February 24, 1998 (19980224)
INVENTOR(s): Oulid-Aissa, Mourad, Boca Raton, FL (Florida), US (United States of America)

Cole, Charles Allen, Coral Springs, FL (Florida), US (United States of America)
Tavanyar, Simon Edwin, Altamonte Springs, FL (Florida), US (United States of America)
ASSIGNEE(s): Siemens Stromberg-Carlson, (A U.S. Company or Corporation),
Boca Raton, FL (Florida), US (United States of America)
APPL. NO.: 8-739,737
FILED: November 07, 1996 (19961107)

CROSS REFERENCE TO RELATED APPLICATION

This is a continuation of Ser. No. 08-678,451 filed Jul. 3, 1996 now abandoned which is a continuation of Ser. No. 08-221,320 filed Mar. 30, 1994, now abandoned.

U.S. CLASS: 707-10 cross ref: 707-103; 707-201
INTL CLASS: [6] G06F 17-30
FIELD OF SEARCH: 395-610; 395-614; 395-617

References Cited

U.S. PATENT DOCUMENTS

4,635,189	1/1987	Kendall	395-600
4,769,772	9/1988	Dwyer	395-600
4,774,661	9/1988	Kumpati	395-600
4,972,367	11/1990	Burke	364-900
5,058,000	10/1991	Cox et al.	364-200
5,185,887	2/1993	Takahishi et al.	395-600
5,193,110	3/1993	Jones et al.	379-94
5,278,978	1/1994	Demers et al.	395-600
5,329,626	7/1994	Klein et al.	395-375
5,345,587	9/1994	Fehskens et al.	395-650
5,374,234	12/1994	Davidson et al.	395-600
5,377,309	12/1994	Sonobe et al.	395-76
5,377,350	12/1994	Skinner	395-600
5,379,424	1/1995	Morimoto et al.	395-600
5,388,258	2/1995	Larsson et al.	395-600
5,402,474	3/1995	Miller et al.	379-93
5,448,634	9/1995	Satomi et al.	379-220
5,469,503	11/1995	Butensky et al.	379-265

NON-U.S. PATENT DOCUMENTS

490465 A3 6/1972 EP (European Patent Office)

OTHER REFERENCES

Pons et al, "A Dynamic and Integrated Concurrency Control for Distributed Databases", IEEE J. on Selected Areas in Comm., vol. 7, No. 3, Apr. 1989 pp. 364-374.

Agrawal et al, "Modular Synchronization in Distributed Multiversion Databases: Version Control and Concurrency Control", IEEE Trans. on Knowledge and Data Engineering, vol. 5, No. 1, Feb. 1993, pp. 126-137.

"Transaction Management in the R* Distributed Database Management System", C. Mohan et al., ACM Transactions on Database Systems, vol. 11, No. 4, Dec., 1986, pp. 378-396.

"A Taxonomy and Current Issues in Multidatabase Systems", M.W. Bright et al., IEEE Computer, Mar. 1992, pp. 50-59.

"Introduction to a System for Distributed Databases (SDD-1)", J.B. Rothnie, Jr. et al., ACM Transactions on Database Systems, vol. 5, No. 1, Mar. 1980, pp. 1-17.

"An Interactive Graphics Editor With Integrated Data Dictionary for IDEF sub o Structured Analysis Diagrams", Hartrum et al., IEEE, 1988, pp. 765-770.

"Application Program Interface Design Based on On-Line Processing Types", Nakatani et al. IEEE, Apr. 1992, pp. 517-524.

"An Interface for Rapid Prototyping and Evolutionary Support of Database-Intensive Applications", Kevin Lynch et al., IEEE, Jun. 1989, pp. 344-348.

"Four References Architectures for Distributed Database Management Systems", James A. Larson, Computer Standards and Interfaces vol. 9, No. 3, Jan. 1, 1989, pp. 209-221.

PRIMARY EXAMINER: Amsbury, Wayne
ATTORNEY, AGENT, OR FIRM: Codispoti, Joseph S.
CLAIMS: 6
EXEMPLARY CLAIM: 1
DRAWING PAGES: 16
DRAWING FIGURES: 19
ART UNIT: 237
FULL TEXT: 1990 lines

ABSTRACT

A distributed database management (DDBMS) system for switching applications that combines rapid feature deployment with high real-time performance. The system architecture encompasses a new software boundary between application and database, yet provides the benefits of open standard interfaces and distributed transaction control. To accomplish this dichotomy, an object-oriented schema is used to arrange the DDBMS as an intelligent service provider, separating services from physical location and implementation. A software containment approach is utilized to optimize interfaces based on grouping of data so as to permit application-specific routines to be "plugged-into" the database. The DDBMS is arranged to address extendibility and real-time performance needs of capabilities such as ISDN and IN is switching offices and network nodes.

... nodes without impacting the client applications. Fragmentation and copy transparencies allow for the changing of different database partitions over time without impact on the ...the users of that service and are optimized to the users requirements. DGWs providing service database access functions are different routines to different users. For example,

to Call Processing, they might be real-time efficient...the session working area and copy them into the requestor's buffer. The SET commands copy attributes from the requestor's buffer into the session working area.

3. Announce ending of access...read, write and search the physical database including separate access to the each of the different levels of the physical database hierarchy.

The users of these data agents include the following functional areas of the database...

1/2,AB,KWIC/36 (Item 18 from file: 654)
DIALOG(R)File 654:US Pat.Full.
(c) format only 2000 The Dialog Corp. All rts. reserv.

02712060

Utility

DISTRIBUTED DATABASE ARCHITECTURE AND DISTRIBUTED DATABASE MANAGEMENT
SYSTEM FOR OPEN NETWORK EVOLUTION

PATENT NO.: 5,687,363
ISSUED: November 11, 1997 (19971111)
INVENTOR(s): Oulid-Aissa, Mourad, Boca Raton, FL (Florida), US (United States of America)
Cole, Charles Allen, Coral Springs, FL (Florida), US (United States of America)
Tavanyar, Simon Edwin, Altamonte Springs, FL (Florida), US (United States of America)
ASSIGNEE(s): Siemens Stromberg-Carlson, (A U.S. Company or Corporation), Boca Raton, FL (Florida), US (United States of America)
APPL. NO.: 8-690,190
FILED: July 26, 1996 (19960726)

CROSS-REFERENCE TO RELATED APPLICATION

This is a continuation of Ser. No. 08-498,067 filed Jul. 5, 1995, now abandoned, which is a continuation of Ser. No. 08-221,300 filed Mar. 30, 1994, now abandoned.

U.S. CLASS: 707-4 cross ref: 379-93.14; 707-8; 707-10
INTL CLASS: [6] G06F 17-30; H04M 11-00; H04M 3-00
FIELD OF SEARCH: 395-608; 395-610; 395-614; 395-615; 395-604; 379-93;
379-94

References Cited

U.S. PATENT DOCUMENTS

4,635,189	1/1987	Kendall	395-600
4,769,772	9/1988	Dwyer	364-300
4,774,661	9/1988	Kumpati	395-600
4,972,367	11/1990	Burke	364-900
5,058,000	10/1991	Cox et al.	364-200
5,185,887	2/1993	Takahashi et al.	395-619
5,193,110	3/1993	Jones et al.	379-94
5,278,978	1/1994	Demers et al.	395-612
5,329,626	7/1994	Klein et al.	395-800

5,345,587	9/1994	Fehskens et al.	395-672
5,375,234	12/1994	Davidson et al.	395-618
5,377,309	12/1994	Sonobe et al.	395-76
5,377,350	12/1994	Skinner	395-683
5,379,424	1/1995	Morimoto et al.	395-602
5,388,258	2/1995	Larsson et al.	395-615
5,402,474	3/1995	Miller et al.	379-93
5,448,634	9/1995	Satomi et al.	379-220
5,469,503	11/1995	Butensky et al.	379-265

NON-U.S. PATENT DOCUMENTS

490 465 6/1992 EP (European Patent Office)

OTHER REFERENCES

"Four References Architectures for Distributed Database Management Systems", James A. Larson, Computer Standards and Interfaces vol. 9, No. 3, Jan. 1, 1989, pp. 209-221.

"An Interactive Graphics Editor, With Integrated Data Dictionary for IDEF sub 0 Structured Analysis Diagrams, Hartrum", et al., IEEE, 1988, pp. 765-770.

"A Dynamic and Integrated Concurrency Control for Distributed Databases", J. Pons, et al., IEE Journal of Selected Areas in Communications, vol. 7, No. 3, Apr. 1989, pp. 364-374.

"Modular Synchronization in Distributed, Multiversion Databases: Version Control and Concurrency Control", Agkawal, et al., IEEE Transactions on Knowledge and Data Engineering, vol. 5, No. 1, Feb. 1993, pp. 126-137.

"An Interface for Rapid Prototyping and Evolutionary Support of Database-Intensive Applications", Kevin Lynch, et al., IEEE, Jun. 1989, pp. 344-348.

"Application Program Interface Design Based on On-Line Processing Types", Nakatani, et al., IEEE, Apr. 1992, pp. 517-524.

M. Bright et al., "A Taxonomy and Current Issues in Multidatabase Systems", IEEE Computer, pp. 50-59, Mar. 1992.

C. Mohan et al. "Transaction Management in the R.* Distributed Database Management System" ACM Trans. Database Systems, vol. 11, No. 4, pp. 378-396, Dec. 1986.

J. Rothuie et al., "Introduction to a System for, Distributed Databases" ACM Trans. Database Systems, vol. 5, No. 1, pp. 1-17, Mar. 1980.

PRIMARY EXAMINER: Black, Thomas G.

ASST. EXAMINER: Choules, Jack M.

ATTORNEY, AGENT, OR FIRM: Codispoti, Joseph S.

CLAIMS: 6

EXEMPLARY CLAIM: 1

DRAWING PAGES: 16

DRAWING FIGURES: 19
ART UNIT: 237
FULL TEXT: 1992 lines

ABSTRACT

A distributed database management (DDBMS) system for switching applications that combines rapid feature deployment with high real-time performance. The system architecture encompasses a new software boundary between application and database, yet provides the benefits of open standard interfaces and distributed transaction control. To accomplish this dichotomy, an object-oriented schema is used to arrange the DDBMS as an intelligent service provider, separating services from physical location and implementation. A software containment approach is utilized to optimize interfaces based on grouping of data so as to permit application-specific routines to be "plugged-into" the database. The DDBMS is arranged to address extendibility and real-time performance needs of capabilities such as ISDN and IN is switching offices and network nodes.

... nodes without impacting the client applications. Fragmentation and copy transparencies allow for the changing of different database partitions over time without impact on the client ...the users of that service and are optimized to the users requirements. DGWs providing service database access functions are different routines to different users. For example, to Call Processing, they might be real-time efficient...the session working area and copy them into the requestor's buffer. The SET commands copy attributes from the requestor's buffer into the session working area.

3. Announce ending of access... read, write and search the physical database including separate access to the each of the different levels of the physical database hierarchy.

The users of these data agents include the following functional areas of the database...

1/2,AB,KWIC/37 (Item 19 from file: 654)
DIALOG(R) File 654:US Pat.Full.
(c) format only 2000 The Dialog Corp. All rts. reserv.

02620037

Utility

LOSSLESS DISTRIBUTION OF TIME SERIES DATA IN A RELATIONAL DATA BASE NETWORK

PATENT NO.: 5,603,024
ISSUED: February 11, 1997 (19970211)
INVENTOR(s): Goldring, Robert D., Morgan Hill, CA (California), US (United States of America)
ASSIGNEE(s): International Business Machines Corporation, (A U.S. Company or Corporation), Armonk, NY (New York), US (United States of America)
[Assignee Code(s): 42640]
APPL. NO.: 8-647,533
FILED: May 15, 1996 (19960515)

This application is a continuation of application Ser. No. 08-134,229, filed Oct. 8, 1993, now abandoned.

U.S. CLASS: 707-203 cross ref: 364-DIG.001; 364-222.81; 364-282.1
INTL CLASS: [6] G06F 17-30
FIELD OF SEARCH: 395-600

References Cited

U.S. PATENT DOCUMENTS

5,280,611	1/1994	Mohan et al.	395-600
5,280,612	1/1994	Lorie et al.	395-600
5,317,731	5/1994	Dias et al.	395-600
5,347,632	9/1994	Filepp et al.	395-200
5,369,757	11/1994	Spiro et al.	395-575
5,440,735	8/1995	Goldring	395-600
5,455,945	10/1995	VanderDrift	395-600
5,530,855	6/1996	Satoh et al.	395-600

OTHER REFERENCES

Kahler et al, "Extended Logging for Database Snapshot Refresh", Proceedings of the 13th International Conference on Very Large Data Bases, pp. 389-398, Sep. 1-4, 1987.

PRIMARY EXAMINER: Amsbury, Wayne
ATTORNEY, AGENT, OR FIRM: Baker, Maxham, Jester & Meador
CLAIMS: 3
EXEMPLARY CLAIM: 1
DRAWING PAGES: 8
DRAWING FIGURES: 12
ART UNIT: 237
FULL TEXT: 814 lines

ABSTRACT

A computer processing system that receives sequences of changes to a data base and records them into an activity log for later retrieval also maintains a consistent change data table that contains sufficient change information for each of the changes to the data base such that the changes can be propagated through multiple copies of the data base by consulting the consistent change data table. The consistent change data includes information sufficient to permit reconstruction of the data base to reflect the condition of the data base at any moment of time in the activity log. Because the consistent change data is complete, it permits producing multi-generational copies of data base tables for replication from one copy level to any other subsequent level, or iteration, of copy.

... well. Those skilled in the art will recognize such parameters as being common to many different data base manager systems, though perhaps referred to by alternative names.

The Log Read Processor 40 also...a snapshot or point-in-time copy, a base aggregate table, or a change aggregate copy. The "base condensed" attribute flag can be set to "Y", "P", or "N". The base condensed flag also can...

1/2,AB,KWIC/38 (Item 20 from file: 654)
DIALOG(R)File 654:US Pat.Full.
(c) format only 2000 The Dialog Corp. All rts. reserv.

02566017

Utility

LOSSLESS DISTRIBUTION OF TIME SERIES DATA IN A RELATIONAL DATA BASE NETWORK

PATENT NO.: 5,553,279
ISSUED: September 03, 1996 (19960903)
INVENTOR(s): Goldring, Robert D., Morgan Hill, CA (California), US (United States of America)
ASSIGNEE(s): International Business Machines Corporation, (A U.S. Company or Corporation), Armonk, NY (New York), US (United States of America)
[Assignee Code(s): 42640]
APPL. NO.: 8-134,229
FILED: October 08, 1993 (19931008)

CROSS-REFERENCE TO RELATED APPLICATIONS

This application is related to the application entitled "Consistent Recreation of Events from Activity Logs" by Robert Goldring filed Oct. 8, 1993 and assigned Ser. No. 08-134,766, now abandoned and the application entitled "Simplified Relational Data Base Snapshot Copying" by Robert Goldring, filed Oct. 8, 1993 and assigned Ser. No. 08-134,763, now U.S. Pat. No. 5,440,735.

U.S. CLASS: 707-201 cross ref: 364-DIG.001; 364-282.1
INTL CLASS: [6] G06F 17-30
FIELD OF SEARCH: 395-600

References Cited

U.S. PATENT DOCUMENTS

4,631,673	12/1986	Haas et al.	395-600
5,133,075	7/1992	Risch	395-800
5,136,707	8/1992	Block et al.	395-600
5,280,612	1/1994	Lorie et al.	395-600
5,287,496	2/1994	Chen et al.	395-600
5,333,316	7/1994	Champagne et al.	395-600
5,440,735	8/1995	Goldring	395-600

OTHER REFERENCES

Tony P. Ng, "Propagating Updates in a Highly Replicated Database," in Proceedings of the Sixth International Conference on Data Engineering, Los Angeles, California, Feb. 5-9, 1990, pp. 529-536.

Gio Wiederhold and Xiaolei Qian, "Consistency Control of Replicated Data in Federated Databases," Proceedings, Workshop on the Management of Replicated Data, Houston, Texas, Nov. 8-9, 1990, pp. 130-132.

Bo Kahler and Oddvar Risnes, "Extended Logging for Database Snapshot Refresh," Proceedings of the 13th International Conference on Very Large

Data Bases, Brighton, England, Sep. 1-4, 1987, pp. 389-398.

PRIMARY EXAMINER: Amsbury, Wayne
ATTORNEY, AGENT, OR FIRM: Baker, Maxham, Jester & Meador
CLAIMS: 13
EXEMPLARY CLAIM: 1
DRAWING PAGES: 8
DRAWING FIGURES: 12
ART UNIT: 237
FULL TEXT: 986 lines

ABSTRACT

A computer processing system that receives sequences of changes to a data base and records them into an activity log for later retrieval also maintains a consistent change data table that contains sufficient change information for each of the changes to the data base such that the changes can be propagated through multiple copies of the data base by consulting the consistent change data table. The consistent change data includes information sufficient to permit reconstruction of the data base to reflect the condition of the data base at any moment of time in the activity log. Because the consistent change data is complete, it permits producing multi-generational copies of data base tables for replication from one copy level to any other subsequent level, or iteration, of copy.

... well. Those skilled in the art will recognize such parameters as being common to many different data base manager systems, though perhaps referred to by alternative names.

The Log Read Processor 40 also...a snapshot or point-in-time copy, a base aggregate table, or a change aggregate copy. The "base condensed" attribute flag can be set to "Y", "P", or "N". The base condensed flag also can...

1/2,AB,KWIC/39 (Item 21 from file: 654)
DIALOG(R) File 654:US Pat.Full.
(c) format only 2000 The Dialog Corp. All rts. reserv.

02506725

Utility

METHOD AND APPARATUS FOR AUTOMATIC GENERATION OF OBJECT ORIENTED CODE FOR MAPPING RELATIONAL DATA TO OBJECTS

PATENT NO.: 5,499,371
ISSUED: March 12, 1996 (19960312)
INVENTOR(s): Henninger, Derek P., Cupertino, CA (California), US (United States of America)
Jensen, Richard H., Redwood City, CA (California), US (United States of America)
Keene, Christopher T., San Francisco, CA (California), US (United States of America)
ASSIGNEE(s): Persistence Software, Inc, (A U.S. Company or Corporation), San Mateo, CA (California), US (United States of America)
EXTRA INFO: Assignment transaction [Reassigned], recorded March 27, 1998 (19980327)

APPL. NO.: 8-409,476
FILED: March 22, 1995 (19950322)

This is a continuation of application Ser. No. 08-095,322 filed Jul. 21, 1993, now abandoned.

U.S. CLASS: 395-702 cross ref: 364-DIG.001; 364-280; 364-280.4; 364-282.1;
364-283.4; 707-102
INTL CLASS: [6] G06F 9-44; G06F 15-40
FIELD OF SEARCH: 395-600; 395-650; 395-700; 395-500

References Cited

U.S. PATENT DOCUMENTS

4,930,071	5/1990	Tou et al.	364-300
5,235,701	8/1993	Ohler et al.	
5,291,583	3/1994	Bapat	395-500
5,295,256	3/1994	Bapat	395-500
5,297,279	3/1994	Bannon et al.	395-600
5,426,780	6/1995	Gerull et al.	395-600

OTHER REFERENCES

db++User's Manual (Feb. 17, 1992) from Rogue Wave.

PRIMARY EXAMINER: Kriess, Kevin A.
ATTORNEY, AGENT, OR FIRM: Townsend and Townsend and Crew Allen, Kenneth R.
CLAIMS: 30
EXEMPLARY CLAIM: 1
DRAWING PAGES: 11
DRAWING FIGURES: 12
ART UNIT: 236
FULL TEXT: 1223 lines

ABSTRACT

A method and apparatus are provided for using an object model of an object-oriented application to automatically map information between an object-oriented application and a structured database, such as a relational database. This is done by taking into account all of the semantics (implications) of an object model, such as inheritance and relationships among object classes, and using these semantics to generate a minimal set of routines for each object class that manipulate the object and other objects to which it is related or from which it inherits. The generated routines, when executed, provide transparent access to relational data or other field-delimited data. Object classes and routines generated using the method encapsulate all the details of database access, such that developers (computer programmers) can write object-oriented applications using those object classes without any explicit reference to or knowledge of the underlying database or its structure. By working with the objects, the user of such applications transparently manipulates the database without needing to know anything of its structure. Applications can be written using the object classes to transparently integrate information from multiple

databases.

... whatsoever to the structured database. The method can be used also with two or more different databases, with the object model transparently integrating them. The invention can be used where a site...

... class and a parent object class of said object model in said structured database by copying attributes of said parent object class from said object oriented application to a table described by...

1/2,AB,KWIC/40 (Item 22 from file: 654)
DIALOG(R)File 654:US Pat.Full.
(c) format only 2000 The Dialog Corp. All rts. reserv.

02441493

Utility

SIMPLIFIED RELATIONAL DATA BASE SNAPSHOT COPYING

PATENT NO.: 5,440,735
ISSUED: August 08, 1995 (19950808)
INVENTOR(s): Goldring, Robert D., Morgan Hill, CA (California), US (United States of America)
ASSIGNEE(s): International Business Machines Corporation, (A U.S. Company or Corporation), Armonk, NY (New York), US (United States of America)
[Assignee Code(s): 42640]
APPL: NO.: 8-134,763
FILED: October 08, 1993 (19931008)
U.S. CLASS: 707-8 cross ref: 364-DIG.001; 364-282.4; 364-283.3; 364-283.4
INTL CLASS: [6] G06F 17-30
FIELD OF SEARCH: 395-500; 395-600

References Cited

U.S. PATENT DOCUMENTS

4,631,673	12/1986	Haas et al.	364-600
5,021,995	6/1991	Quint et al.	395-600
5,202,996	4/1993	Sugino et al.	395-700
5,369,764	11/1994	Blair	395-650

OTHER REFERENCES

Tony P. Ng, "Propagating Updates in a Highly Replicated Database," in Proceedings of the Sixth International Conference on Data Engineering, Los Angeles, California, Feb. 5-9, 1990, pp. 529-536.

Gio Wiederhold and Xiaolei Qian, "Consistency Control of Replicated Data in Federated Databases," in Proceedings, Workshop on the Management of Replicated Data, Houston, Texas, Nov. 8-9, 1990, pp. 130-132.

Bo Kahler and Oddvar Risnes, "Extended Logging for Database Snapshot Refresh," Proceedings of the 13th International Conference on Very Large Data Bases, Brighton, England, Sep. 1-4, 1987, pp. 389-398.

PRIMARY EXAMINER: Black, Thomas G.

ASST. EXAMINER: Loomis, John C.
ATTORNEY, AGENT, OR FIRM: Baker, Maxham, Jester & Meador
CLAIMS: 14
EXEMPLARY CLAIM: 1
DRAWING PAGES: 13
DRAWING FIGURES: 16
ART UNIT: 237
FULL TEXT: 853 lines

ABSTRACT

A relational data base management system permits users to specify copy operations without being burdened with specifying details of structure, copy refresh algorithm, and the like. The attributes a user must specify when requesting snapshot copies is reduced by defining data structures with attributes such that specifying the name of a table, whether a user data table or snapshot, specifies the copying scheme that will be used. Any ambiguity is resolved by interactively querying the user. When a user initially defines, or registers, a source table, the user specifies a set of predefined attributes, including table structure and completeness. When a user later requests a snapshot copy, the system automatically determines the nature of the copy operation to be performed by matching the table name with its registered attributes. This permits the system to automatically determine details such as the structure of the target table, the manner in which snapshot refresh will occur, and whether the target table can be created from a snapshot copy or if the original user table must be consulted. In this way, specifying copies in a relational data base system is simplified.

... performed. Those skilled in the art will recognize such parameters as being common to many different data base manager systems, though perhaps referred to by alternative names.

The Log Read Processor 40 also...a snapshot or point-in-time copy, a base aggregate table, or a change aggregate copy. The "base condensed" attribute flag can be set to "Y", "P", or "N" for indicating attributes for the source...read from the activity log.

FIG. 8 is a flow diagram illustrating the registration of attributes for a new copy source table. As noted above, an administrative interface provided by a software process of the...thereby becomes known to the Apply Processor and Log Read Processor.

FIG. 9 illustrates how attributes of a new copy are determined during the subscription definition phase of the copying operation. The copy operation begins...

...condensed attribute of N, respectively. As indicated in the flow diagram box numbered 718, the attributes of the copy table are defined accordingly. An error indication is provided at the box numbered 720 if...

... snapshot copy, and also a base aggregation (BA) table. At the box numbered 724, the copy table attributes are defined accordingly. If the outcome at the decision box 710 determines that there ... or a ConsistentChangeData table copy at the decision box numbered 746. Selection of a snapshot copy determines the tables attributes, as indicated at

the flow diagram box numbered 748. Selection of a ConsistentChangeData table copy...

...respectively.

FIG. 11 illustrates the steps followed by the system 10 in using the predefined attribute information when a copying operation is carried out. The system assumes that potential copy sources are all derived from... P". If the source condensed attribute is set to "A" then the system checks the copy structure attribute for being either a base aggregate table or a change aggregate table, as indicated at...

...connector "12" indicates the flow diagram continues at FIG. 12).

In FIG. 12, if the copy structure attribute indicates a base aggregate (BA) table, then at box 816 the system searches for a...

... assumes an SQL function and proceeds with operation at the box numbered 824.

If the copy structure attribute at decision box 810 indicated that the table has a change aggregate (CA) structure, then...

... then at box 834 the system refreshes the target table from the source table, completing copy processing for condensed attribute "A" values.

If the condensed attribute checked at decision box 802 (FIG. 11) was set ...

1/2,AB,KWIC/41 (Item 23 from file: 654)
DIALOG(R)File 654:US Pat.Full.
(c) format only 2000 The Dialog Corp. All rts. reserv.

01849531

Utility
META-INTERPRETER

PATENT NO.: 4,905,138
ISSUED: February 27, 1990 (19900227)
INVENTOR(s): Bourne, David A., Pittsburgh, PA (Pennsylvania), US (United States of America)
ASSIGNEE(s): Westinghouse Electric Corp , (A U.S. Company or Corporation)
, Pittsburgh, PA (Pennsylvania), US (United States of America)
[Assignee Code(s): 91840]
EXTRA INFO: Assignment transaction [Reassigned], recorded June 24,
1999 (19990624)
APPL. NO.: 7-260,214
FILED: October 20, 1988 (19881020)

This is a division of application Ser. No. 788,650, filed Oct. 17, 1985, now U.S. Pat. No. 4,787,035.

U.S. CLASS: 395-707 cross ref: 364-DIG.001; 364-254; 364-254.6; 364-256.8;
364-274; 364-274.1; 364-274.5; 364-280; 364-280.4; 364-281.3;
364-281.7; 364-282.1; 395-680
INTL CLASS: [4] G06F 9-44

FIELD OF SEARCH: 364-200; 364-300; 364-900

References Cited

U.S. PATENT DOCUMENTS

4,719,564	1/1988	Hara	364-200
4,755,932	7/1988	Diedrich	364-200
4,764,863	8/1988	Silverthorn et al.	364-200
4,797,811	1/1989	Kiyokawa et al.	364-200

PRIMARY EXAMINER: Zache, Raulfe B.

CLAIMS: 17
EXEMPLARY CLAIM: 1
DRAWING PAGES: 24
DRAWING FIGURES: 53
ART UNIT: 232
FULL TEXT: 2255 lines

ABSTRACT

The present invention includes an interpreter in which a parser examines a message using grammar and lexical tables to produce a parse table. The parse table is compared to data needed in a semantics table to fire a rule. The firing of a rule causes a function table to be evaluated. The function table includes function calls which can perform user desired functions. Among the functions is a generate function which will take the contents of a table and turn it into a message and route the message to a destination where the destination can be a table, process or device. Plural interpreters can be created where each interpreter includes a workspace containing the above-mentioned tables. Each interpreter can perform a different task such as recognizing the meaning of a message in one language and performing some action such as sending out a message in a different language or updating a database. The present invention is particularly suitable for managing a machining workcell including machines from different vendors.

ABSTRACT

...in one language and performing some action such as sending out a message in a different language or updating a database. The present invention is particularly suitable for managing a machining workcell including machines from different...

... both items of the source and target are known then the actual item values and attributes can be updated (Copy Item To Item) by using the pointer to the source to retrieve the value and...

?begin 275,647

25sep00 13:29:38 User219455 Session D652.3

\$3.26 0.686 DialUnits File349

\$76.50 15 Type(s) in Format 5 (UDF)

\$76.50 15 Types

\$79.76 Estimated cost File349

\$5.96 1.010 DialUnits File653

\$9.60 3 Type(s) in Format 9 (UDF)

\$9.60 3 Types

\$15.56 Estimated cost File653

\$23.10 3.915 DialUnits File654

\$73.60 23 Type(s) in Format 9 (UDF)

\$73.60 23 Types
 \$96.70 Estimated cost File654
 OneSearch, 3 files, 5.611 DialUnits FileOS
 \$0.25 TYMNET
 \$192.27 Estimated cost this search
 \$199.23 Estimated total session cost 10.775 DialUnits

SYSTEM:OS - DIALOG OneSearch

File 275:Gale Group Computer DB(TM) 1983-2000/Sep 25

(c) 2000 The Gale Group

File 647:CMP Computer Fulltext 1988-2000/Sep W1

(c) 2000 CMP

Set	Items	Description
---	-----	-----
?s (heterogeneous or heterogenous or different) (4n) (database? or data(w)base?)		
and copy? (3n) attribute?		
	8860	HETEROGENEOUS
	520	HETEROGENOUS
	193295	DIFFERENT
	170062	DATABASE?
	472987	DATA
	602735	BASE?
	29106	DATA(W) BASE?
	4567	((HETEROGENEOUS OR HETEROGENOUS) OR DIFFERENT) (4N) (DATABASE? OR DATA(W) BASE?)
	233316	COPY?
	34300	ATTRIBUTE?
	148	COPY? (3N) ATTRIBUTE?
S1	4	(HETEROGENEOUS OR HETEROGENOUS OR DIFFERENT) (4N) (DATABASE? OR DATA(W) BASE?) AND COPY? (3N) ATTRIBUTE?
?t 1/2,ab,kwic/1-4		

1/2,AB,KWIC/1 (Item 1 from file: 275)
 DIALOG(R) File 275:Gale Group Computer DB(TM)
 (c) 2000 The Gale Group. All rts. reserv.

01793456 SUPPLIER NUMBER: 16978707 (USE FORMAT 7 OR 9 FOR FULL TEXT)
 PowerBuilder gets (up)graded: Powersoft bolsters its client/server
 development environment with release 4.0. (Software Review) (Evaluation)
 McClanahan, David
 DBMS, v8, n7, p86(5)
 June, 1995
 DOCUMENT TYPE: Evaluation ISSN: 1041-5173 LANGUAGE: ENGLISH
 RECORD TYPE: FULLTEXT; ABSTRACT
 WORD COUNT: 3042 LINE COUNT: 00249

ABSTRACT: Powersoft's PowerBuilder 4.0 4GL client/server front-end
 development system makes programmers more productive: it is powerful,
 object-oriented, extensible, and easy to use. Most of an application is
 defined by creating windows and controls with the program's 'painter'
 utilities, which include the Application Painter that defines the general
 details about the application, the Window Painter, Menu Painter, DataWindow
 Painter, Structure Painter, Database Painter, SQL Painter, Function
 Painter, Library Painter, and User Object Painter. The Window Painter lets
 users add graphical objects to windows and PowerScript code to handle

events and take actions. The PowerScript high-level, object-oriented, event-driven programming language is modeled after Basic and provides more than 500 functions for database access, communications among objects, numeric and string processing, data conversion, and other operations. The performance of DataWindows is improved in version 4.0, as are window display speeds; the interface is also much improved. PowerBuilder is a powerful client/server development system for Windows; it will become even more attractive as it becomes available for other platforms.

SPECIAL FEATURES: illustration; other
COMPANY NAMES: Powersoft Corp.--Products
DESCRIPTORS: Software Single Product Review; DBMS; Application
Development Software
PRODUCT/INDUSTRY NAMES: 7372420 Database Mgmt Software Pkgs (Micro)
SIC CODES: 7372 Prepackaged software
TRADE NAMES: PowerBuilder for Windows 4.0 (DBMS)--Evaluation
OPERATING PLATFORM: Microsoft Windows
FILE SEGMENT: CD File 275

... utility, the Data Pipeline, that lets you copy (or move) tables and data from one database to another (even across different DBMSs). Using the Data Pipeline, you can copy a database table from an Oracle database...

...create, replace, or append the destination table, set the frequency of commits, and whether to copy the extended attributes (metadata) to the destination database. At this point, you can save the Data Pipeline definition...

1/2,AB,KWIC/2 (Item 2 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
(c) 2000 The Gale Group. All rts. reserv.

01585545 SUPPLIER NUMBER: 13427792 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Borland International Quattro Pro 1.0 for Windows. (Software Review) (one of three evaluations of spreadsheet software in 'Picking the Perfect Spreadsheet') (Evaluation)
Faulkner, Mike; Watterson, Karen; Hendrickson, Lee
Windows Sources, v1, n2, p386(7)
March, 1993
DOCUMENT TYPE: Evaluation ISSN: 1065-9641 LANGUAGE: ENGLISH
RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 4163 LINE COUNT: 00316

ABSTRACT: Borland International Inc's Quattro Pro for Windows spreadsheet software, which costs \$495 for one user and \$395 for a server, is a powerful, easy-to-use program, although its database functions could be improved. Sheets created in Quattro Pro are grouped into sets called Notebooks, which are a useful organizational tool. Each Notebook's last page is reserved for graphics, such as slide shows and dialog boxes. The spreadsheet uses other inventive organizational methods, such as the capability of moving cells individually, the Group mode and the Speedbar, which is a customizable toolbar. The program also includes UI Builder, which is a front-end developer, and support for the atfunctions in Lotus Development Corp's Lotus 1-2-3 spreadsheet files. Database Desktop enables users to connect Notebooks with databases.

COMPANY NAMES: Borland International Inc.--Products
DESCRIPTORS: Evaluation; Spreadsheet Software; Software Packages
SIC CODES: 7372 Prepackaged software
TICKER SYMBOLS: BORL
TRADE NAMES: Borland Quattro Pro for Windows (Spreadsheet software)--
evaluation
OPERATING PLATFORM: MS Windows
FILE SEGMENT: CD File 275

... Microsoft Draw. You can edit all the individual objects in the graph and change their attributes . You can also copy a range of cells to the Clipboard and paste them into Microsoft Graph, another Word...are differences in how queries and sorts are performed, too. For example, Quattro Pro and Database Desktop use different wildcards. QPW uses*, ?, and [unkeyable] (NOT) in a search criterion range; Database Desktop uses the...

...There are differences in how queries and sorts are performed, too. For example Quattro and Database Desktop use different wildcards: Quattro uses *,?, and | (NOT) in a search criterion range, but Database Desktop uses the...

1/2,AB,KWIC/3 (Item 3 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
(c) 2000 The Gale Group. All rts. reserv.

01521833 SUPPLIER NUMBER: 12239708 (USE FORMAT 7 OR 9 FOR FULL TEXT)
New tools on the Works bench. (Software Review) (Symantec's GreatWorks 2.0, Claris' ClarisWorks, MacVonk USA's HandiWorks, Beagle Bros' BeagleWorks integrated software) (Evaluation)
Schneider, Roxanne
Technology & Learning, v12, n7, p20(8)
April, 1992
DOCUMENT TYPE: Evaluation ISSN: 1053-6728 LANGUAGE: ENGLISH
RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 4204 LINE COUNT: 00331

ABSTRACT: Microsoft Works has long been the foremost integrated software package for the Macintosh. Integrated software combines a data base, word processor, drawing tool, spreadsheet, and communications capabilities into a single product. Now, there are a number of excellent competing products on the market, including Symantec Corp.'s GreatWorks 2.0, Claris Corp.'s ClarisWorks, MacVonk USA's HandiWorks, and Beagle Brothers' BeagleWorks. For anyone considering the purchase of an integrated package it is important to consider how well it works with Apple's new System 7.0 operating system, and how well the relevant package modules actually meet user demands. Detailed is an overview of each product.

COMPANY NAMES: Symantec Corp.--Products; Claris Corp.--Products; MacVONK USA Inc.--Products; Beagle Brothers Inc.--Products
DESCRIPTORS: Comparison; Evaluation; Integrated software; Microcomputer
SIC CODES: 7372 Prepackaged software
TICKER SYMBOLS: SYMC
TRADE NAMES: Apple Macintosh (680X0-based system)--evaluation; GreatWorks 2.0 (Integrated software)--evaluation; HandiWorks (Integrated software)--evaluation; BeagleWorks (Integrated software)--evaluation; ClarisWorks (Integrated software)--evaluation

OPERATING PLATFORM: Apple Macintosh
FILE SEGMENT: CD File 275

... until you've achieved the look you want. You can lighten or darken an object, copy its attributes (fill pattern, colors, etc.) to another object, edit your paintbrush, zoom to 800 percent for...

...access to a bezier curve tool; 11 line patterns; 800 percent zoom; a tool to copy attributes ; smoothing, duplicating, sizing, and reshaping capabilities; snap-to-grid; draw-from-center; and then the...out, as well as from corner to corner. You can zoom to 800 percent, and copy pen and fill attributes onto other objects. The usual rearrangements of objects--rotations, flips, alignments, scaling, etc.--are available...
...records will look with the layout design you are working on. You may design 32 different layouts for a single database . One other interesting feature allows you to set a background picture behind the database layout...

1/2,AB,KWIC/4 (Item 1 from file: 647)
DIALOG(R)File 647:CMP Computer Fulltext
(c) 2000 CMP. All rts. reserv.

01040494 CMP ACCESSION NUMBER: OST19950109S0005
It's Good And Bad News On PowerBuilder (OST Labs First Look)
Julie Anderson
OPEN SYSTEMS TODAY, 1995, n 166, PG1
PUBLICATION DATE: 950109
JOURNAL CODE: OST LANGUAGE: English
RECORD TYPE: Fulltext
SECTION HEADING: News
WORD COUNT: 840
TEXT:

PowerBuilder 4.0 is a big improvement over 3.0, adding new multiplatform and OLE 2.0 support, ease-of-use features, and data migration capabilities to the application development package. But at the same time it is disappointing.

... operation. The source tables must be from the same database, but the source and target databases can be from different vendors.

The target table can be created or replaced, or rows can be inserted, appended...

...the number of errors to tolerate before aborting the operation. Finally, you specify whether to copy extended attributes from the source tables to the target table.

Once the parameters are defined, the actual...
?t 1/9/1,4

1/9/1 (Item 1 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
(c) 2000 The Gale Group. All rts. reserv.

01793456 SUPPLIER NUMBER: 16978707 (THIS IS THE FULL TEXT)
PowerBuilder gets (up)graded: Powersoft bolsters its client/server development environment with release 4.0. (Software Review) (Evaluation)
McClanahan, David

DBMS, v8, n7, p86(5)

June, 1995

DOCUMENT TYPE: Evaluation ISSN: 1041-5173 LANGUAGE: ENGLISH

RECORD TYPE: FULLTEXT; ABSTRACT

WORD COUNT: 3042 LINE COUNT: 00249

ABSTRACT: Powersoft's PowerBuilder 4.0 4GL client/server front-end development system makes programmers more productive: it is powerful, object-oriented, extensible, and easy to use. Most of an application is defined by creating windows and controls with the program's 'painter' utilities, which include the Application Painter that defines the general details about the application, the Window Painter, Menu Painter, DataWindow Painter, Structure Painter, Database Painter, SQL Painter, Function Painter, Library Painter, and User Object Painter. The Window Painter lets users add graphical objects to windows and PowerScript code to handle events and take actions. The PowerScript high-level, object-oriented, event-driven programming language is modeled after Basic and provides more than 500 functions for database access, communications among objects, numeric and string processing, data conversion, and other operations. The performance of DataWindows is improved in version 4.0, as are window display speeds; the interface is also much improved. PowerBuilder is a powerful client/server development system for Windows; it will become even more attractive as it becomes available for other platforms.

TEXT:

One of the fastest ways to increase your worth today as a client/server developer is to become proficient with PowerBuilder. PowerBuilder is one of the leading 4GL client/server front-end development systems for Microsoft Windows (with Macintosh and Unix Motif versions to be released this year). PowerBuilder provides exceptional productivity to the developer, while being powerful, object-oriented, extensible, and easy to use (considering its power). While it still doesn't meet all of my requirements for the ideal tool, I think it is a great product.

In December, Powersoft Corp. (now a Sybase company) released PowerBuilder 4.0. While this is a significant upgrade, it is not as dramatic a change as was the 3.0 release. In this review, I focus on the new features in version 4.0. (For a walk through the development process with PowerBuilder, see my article, "The PowerBuilder Primer," DBMS, October 1993, page 57.)

A PowerBuilder Overview

For those of you who are not yet familiar with PowerBuilder, here's a brief overview of the product. PowerBuilder is known mainly for its ease of use. You define most of your application by creating windows and controls with PowerBuilder's various "painter" utilities. The painter utilities include:

- * Application Painter -- defines the general details about each application.
- * Window Painter -- creates windows and window controls such as radio buttons.
- * Menu Painter -- creates menus for application windows.
- * DataWindow Painter -- creates a special type of control that is database intelligent and acts as the main tool for data interaction.
- * Structure Painter -- allows the creation and maintenance of data constructs.
- * Database Painter -- a tool for database access and administration.
- * SQL Painter -- lets you visually construct and edit SQL statements.
- * Function Painter -- used to write procedures in PowerBuilder's

PowerScript language.

- * Library Painter -- manages the libraries where the application components reside.

- * User Object Painter -- creates custom controls. This lets you create a control and then treat it as if it were another PowerBuilder control. Or, you can create classes (non-visual objects) that simply capture some behavior.

To build an application, you spend much of your time developing windows in the Window painter. With this tool, you can add graphical objects to windows and then add the PowerScript code to handle events and take actions. The controls consist of standard Microsoft Windows objects, such as radio buttons, pushbuttons, list boxes, edit fields, spin buttons, and pictures. PowerBuilder also provides a specialized data-handling control called a DataWindow, which lets you encapsulate your data access in a database, intelligent object. Using point-and-click controls, PowerBuilder generates the SQL statements needed for associating the objects with data items. Other controls include graphs and OLE 2.0 controls.

PowerScript is PowerBuilder's highlevel, object-oriented, event-driven programming language modeled after Basic. It provides more than 500 functions for database access, communications among objects, numeric and string processing, data conversion, and so on. The language contains the constructs for the conditional execution of code and looping, and provides variables with different scoping. You can attach PowerScript code to the PowerBuilder objects. All code execution is triggered by an event or by a message sent from another script.

New With Version 4.0

DataWindows are PowerBuilder's most powerful feature. Powersoft improved DataWindow performance in several areas, including simple sorts (of rows in the DataWindow). Another DataWindow enhancement reduces the amount of coding required to create more complex reports. The new composite and nested reports combine DataWindow objects into a single report. You can use nested reports to create master-detail reports easily. Figure 1 shows an example of a PowerBuilder 3.0 master-detail relationship created using two DataWindows (and some programming code). Coding is required to trigger retrieval of the corresponding data in the detail DataWindow.

Figure 2 (page 89) shows the same master-detail relationship implemented as nested DataWindows in version 4.0. This required only the definition of the link between the tables; coding was not necessary. One of the great features of nested DataWindows is that they print exactly as they display. Calling the Print function produces a printout that would require dozens (or even hundreds) of lines of code in version 3.0. This is a very useful feature.

Another new feature, sliding columns, lets you remove spaces between fields, such as between first name and last name, or remove blank lines such as the second address line in a mailing label. You can now make references to computed fields; thus, you can use the calculated value in other functions and in other objects. Version 4.0 has a new SELECT painter. This painter, which is used to create SQL SELECT statements graphically, uses a Windows tab-style interface. The main advantage of the tab interface is that it allows easier navigation to related information on a screen. Tabs will be widely used in Windows 95.

Performance Improvements

I hear more complaints about PowerBuilder's performance than any of its other problems (instability of the development environment is second). Fortunately, PowerBuilder 4.0 has improved performance in several areas, including window display speeds. Powersoft improved the speed of object instantiation, especially for objects that have complex inheritance

hierarchies. Generally, performance is better, especially on machines with more memory (12MB or more). The actual improvement is noticeable, but difficult to quantify. I cannot say, for example, that I see even a 30 percent improvement across the board, but users of the applications that I have moved to 4.0 have also noticed the improvement. Overall, however, I was disappointed with the improvements made in application performance. I was hoping for compiler technology similar to what Gupta added to SQLWindows 5.0. (See my review in DBMS, January 1995, page 36, for more details.) PowerBuilder is an interpreted language (using p-code), and your "compiled" applications require a runtime system to execute. There is no additional cost for the distribution of the runtime system.

To improve performance, you could (and probably should) implement the business logic and data processing as C or C++ code in a DLL. You could then call those functions directly from your PowerBuilder application. The Enterprise Edition of version 4.0 includes a C++ Class Builder. This is a version of the Watcom C++ compiler that lets you write C++ user objects that interface with PowerBuilder. The Class Builder does the tedious part of the work, creating the headers and building the interface to the DLL automatically. The Watcom system will build a project that encapsulates each user object. You may add existing C++ code to a new project if you wish.

Other New Features

Other new features of PowerBuilder 4.0 include numerous enhancements and several new painters. The Project Painter is a new utility that lets you create and maintain project objects. A project object contains all the information that is necessary to build an application (which includes .exe and .pbd files). This greatly simplifies the application development process. After you create a project definition, you can build or rebuild the executable without having to reenter any of the project information.

The process of creating a project is similar to creating an executable in version 3.0. To create a project, you first define the executable file name and set options that will have PowerBuilder prompt you before overwriting existing .exe or .pdb files during the build process. You can also choose to have the objects in the libraries regenerated before each file is built. You can specify whether each library should be a PBD (PowerBuilder Dynamic library), and you can select resource files that are needed by the libraries or the executable. All of this information is retained in the project and will be used to generate future builds automatically. Projects do not use the source-control system.

PowerBuilder 4.0 has a new database utility, the Data Pipeline, that lets you copy (or move) tables and data from one database to another (even across different DBMSs). Using the Data Pipeline, you can copy a database table from an Oracle database to a Watcom database, or you can copy data to a local database so that you can work on an application without having access to the network server. The Data Pipeline functionality is also available as PowerScript functions, so you can add the Data Pipeline functionality to your PowerBuilder applications.

The first step in using the Data Pipeline is to select the source and destination database profiles. The profiles give PowerBuilder the necessary information to connect to each data source. PowerBuilder then connects to the source database and lets you graphically create the SQL SELECT statement that will move the data from the source database to the destination database. In the next dialog, you specify a number of parameters that define details such as the destination table name, whether to create, replace, or append the destination table, set the frequency of commits, and whether to copy the extended attributes (metadata) to the destination database. At this point, you can save the Data Pipeline

definition and then execute it.

The new QuickApp function in PowerBuilder creates a multiple document interface (MDI) application template. Most large Windows applications, such as Word, Excel, and the PowerBuilder development environment, use the MDI style to manage multiple child windows within a base parent window. QuickApp speeds up the initial creation of an MDI application because it creates the set of components that make up most MDI applications, thereby eliminating the mechanical part of the initial process. You will probably use the template whenever you create a new MDI application (unless you already have created a prototype of your own). The template application contains the following objects:

- * w_genapp_frame -- the MDI frame (the main container window)
- * m_genapp_frame -- a menu for the MDI frame
- * w_genapp_sheet -- a MDI sheet (a child window)
- * m_genapp_sheet -- a menu for the MDI sheet
- * wgenapp_toolbars -- a window that lets the user position the application toolbars
- * w_genapp_about -- an "about" box that provides information about your application

The new template application provides only minimal functionality. The template provides only a frame, sheet, and a couple of menus. However, because all MDI applications use these objects, it is easier to modify the template to shape your own application than to start from scratch.

Powersoft made minimal changes to PowerBuilder's object hierarchy. Powersoft moved the TriggerEvent and PostEvent functions higher up in the PowerBuilder class hierarchy. Now, you can use these functions with all objects, including a window control array.

PowerBuilder allows the integration of other Windows programs, with good support for DDE, OLE, and DLLs. DDE allows communication between windows. One process establishes itself as a DDE server, which means that it will provide data and/or other services. Another process, the DDE client, establishes contact (a charmed with a DDE server, and the conversation takes place as a series of messages passed back and forth over the opened channel.

OLE is Microsoft's object technology that enables Windows' programs to work together. For example, OLE will let you launch Excel from within your PowerBuilder application to view or edit a spreadsheet. Data can also be moved to or from Excel to the application. The previous OLE support (in PowerBuilder 3.0) let you embed an object in a DataWindow as an OLE column. You could then manipulate the object using the server application. Version 4.0 adds an OLE 2.0 control to the Window Painter. To use this, you drop an OLE control into a window and then hook up the object to a server using PowerBuilder dialog boxes and PowerScript code. Using this technique, you can add OLE to a window directly, without requiring a DataWindow. For a comprehensive look at OLE 2.0, see Ken North's article on page 50.

Interface Improvements

In the new version, the PowerBuilder interface is much improved. Many dialogs now use tab controls, which make them easier to use. Figure 3 shows an example of one of the new tab dialogs. Unfortunately, PowerBuilder 4.0 does not provide a tab control for use in your PowerBuilder applications. Powersoft will add tab controls in the next release (after the release of Windows 95). You can purchase tab controls from third-party vendors, but unless you must have them now, I recommend that you wait for PowerBuilder's controls.

One of the most important improvements in version 4.0 is that you can now undo and redo the object sizing and alignment operations (when creating windows, user objects, and DataWindows). This is a very useful option --

It's easy to mess up a window by selecting the wrong operation or by selecting objects in the wrong order before applying the operation. For example, if you choose to align a set of objects in the wrong dimension (that is, vertically instead of horizontally), the objects will all end up in a pile instead of arranged across the window.

Powersoft removed DOS file systemspecific aspects from the interface in order to provide the same interface across multiple platforms. (Powersoft will deliver Mac and Unix versions of PowerBuilder later this year.) Powersoft broke a number of the larger dialogs into two smaller screens. This is slightly less convenient in some cases, but the trade-off is worthwhile. Powersoft applications written for Windows (using version 4.0) will be directly portable to the other supported platforms without any change. To create the executables, you will simply recompile. Because PowerBuilder is an interpreter, the application code can be read by the runtime system on any of the supported platforms.

PowerBuilder 4.0 has a new dialog in the PowerScript editor that lets you paste the current object's attributes and functions into your code. This eliminates several steps that would be required to find these attributes (or functions) using the more general Browse Objects dialog.

For example, suppose you are editing the code for a command button's Clicked event and you want to disable the button after it is clicked. To find the attribute associated with disabling the button (with the new 4.0 option), you now select Browse Object, click on A tribute, and select Enabled from the list to paste "enabled" into your script. In version 3.0, this would have taken several additional steps. You would enter the Object Browser and then select the window radio button. Next you would have doubleclicked on the current window to display the list of controls that it contains. In this list you would have selected the current command button and then clicked on another radio button to select the list of attributes for a command button. The new process streamlines the task.

User Objects

PowerBuilder has a special type of object, called a User Object, that lets you encapsulate code, variables, structures, and standard controls. You create User Objects for encapsulation and reusability. They are essentially packaged objects with well-defined interfaces. PowerBuilder 4.0 adds a new type of User Object, the standard class User Object. This is a nonvisual (it does not use window controls) User Object that is based on one of the PowerBuilder system objects. This lets you encapsulate and extend the system objects such as the Message or Error object easily. PowerBuilder 4.0 has also renamed the version 3.0 standard nonvisual object -- it is now called a custom class object.

Third-Party Interface

PowerBuilder 4.0 provides better integration with third-party tools. For example, PowerBuilder's interface to Intersolv Inc.'s (Rockville, Md.) PVCS (a source-code control system) works much better now. In version 3.0, I didn't consider PVCS to be usable. It was very slow and didn't manage the application at the PowerBuilder object level. Now I find it easy to use (from within PowerBuilder) and much faster. This is another key improvement; Intersolv deserves a share of the credit for this work.

Areas for Improvement

Despite its power, PowerBuilder 4.0 has some room for improvement. Most of all, I would like to see performance improvements (using compiler technology) and improvements in the stability of the development environment. Also high on my list would be expanded support for three-tier development and expanded object-oriented support.

In addition, Powersoft has had a few problems dealing with its expansion and growth. I hope that Powersoft's merger with Sybase will

influence Powersoft in a positive manner. For example, I hope that the Sybase development methodology filters over to the Powersoft development process. Sybase has a rigorous problem-tracking and code maintenance system that I believe will help the PowerBuilder developers. Sybase has announced that Powersoft will continue to be run as an independent organization.

To Powersoft's credit, it has made significant improvements in other areas. For example, the support for PowerBuilder has improved, and I have recently found that my calls to support were handled quickly and efficiently. There is an additional charge for all support beyond the initial free 30-day installation assistance. Powersoft also issues quarterly maintenance releases of PowerBuilder to provide bug fixes and other enhancements.

A Must for Developers

PowerBuilder version 4.0 is a powerful client/server application development system for Windows. I am currently using PowerBuilder in six different projects, and have found that it greatly reduces the effort required for handling database access and building GUIs (it also makes a great prototyping tool). As PowerBuilder becomes available on other platforms, it will become an even more attractive choice.

David McClanahan has worked on all aspects of client/server development for large systems. He is the author of several books and a consultant based in Cincinnati, Ohio. You can reach David via CompuServe at 72517,1124.

COPYRIGHT 1995 M&T Publishing Inc.

SPECIAL FEATURES: illustration; other
COMPANY NAMES: Powersoft Corp.--Products
DESCRIPTORS: Software Single Product Review; DBMS; Application
Development Software
PRODUCT/INDUSTRY NAMES: 7372420 Database Mgmt Software Pkgs (Micro)
SIC CODES: 7372 Prepackaged software
TRADE NAMES: PowerBuilder for Windows 4.0 (DBMS)--Evaluation
OPERATING PLATFORM: Microsoft Windows
FILE SEGMENT: CD File 275

1/9/4 (Item 1 from file: 647)
DIALOG(R)File 647:CMP Computer Fulltext
(c) 2000 CMP. All rts. reserv.

01040494 CMP ACCESSION NUMBER: OST19950109S0005
It's Good And Bad News On PowerBuilder (OST Labs First Look)
Julie Anderson
OPEN SYSTEMS TODAY, 1995, n 166, PG1
PUBLICATION DATE: 950109
JOURNAL CODE: OST LANGUAGE: English
RECORD TYPE: Fulltext
SECTION HEADING: News
WORD COUNT: 840
TEXT:

PowerBuilder 4.0 is a big improvement over 3.0, adding new multiplatform and OLE 2.0 support, ease-of-use features, and data migration capabilities to the application development package. But at the same time it is disappointing.

Version 4.0 lays the foundation for multiplatform support, but so far it runs only on Windows and Windows NT. Its new support for OLE 2.0 is fraught with caveats. And while a number of minor enhancements make

PowerBuilder easier to use, Powersoft has not changed the fact that code must be written to do almost anything.

One unqualified enhancement, however, is the new pipelining feature, which lets you migrate data from one database into another. Other useful improvements include native database support for Sybase System 10, and improved drivers for Microsoft SQL Server, Informix, and Oracle7. ODBC drivers now support version 2.0 of the ODBC specification, and PowerBuilder Enterprise for Windows bundles the newest version of the Watcom SQL database (4.0), which adds stored procedures and triggers.

Although Powersoft promised that this version would be multiplatform, it will be a few more months before the Mac version is released, followed by Unix versions some months after that. To get ready for cross-platform applications, Powersoft has added several function calls that identify the processor and operating system on which an application is running.

The OLE 2.0 support, unfortunately, is spotty. A PowerBuilder application can be an OLE 2.0 container, but not a server. This means that a PowerBuilder application can link or embed objects, such as spreadsheets, graphs, or documents, from other applications, but it cannot display and edit objects, such as reports, within other applications. However, InfoMaker, Powersoft's new query and reporting tool, can be an OLE 2.0 server, so it can be used to embed PowerBuilder reports in other OLE applications.

OLE support in DataWindows is still limited to OLE 1.0. You can link to (but not embed) objects from other applications in a BLOB (Binary Large Object) column if your database supports BLOBs.

OLE controls placed on a window or in a user object do support OLE 2.0, which allows you to link or embed objects and edit either off-site or in-place. With in-place editing, the server application opens within PowerBuilder, and the menus for both applications are merged according to your specifications.

Using OLE automation—a 2.0 feature—you can send application-dependent commands to a server to invoke its functions.

The new pipelining feature is useful both during development and after your application is deployed. For application testing, you could download portions of a server database to a local Watcom database. For a remote user, the application could collect and store database updates locally, and later upload those updates to a server database when the user reconnects.

When you create the pipeline object, you specify one or more source tables, the target table, and the operation. The source tables must be from the same database, but the source and target databases can be from different vendors.

The target table can be created or replaced, or rows can be inserted, appended, or updated in an existing table. You also specify how often the new data should be committed to the target table (every *n* rows or only at the end of the download), and the number of errors to tolerate before aborting the operation. Finally, you specify whether to copy extended attributes from the source tables to the target table.

Once the parameters are defined, the actual pipelining can be performed interactively through the new Pipeline painter or programmatically.

You must supply a DataWindow control to the pipeline so that it can display any error rows along with an error message. When errors occur, the user can edit those rows in the DataWindow control, and the application can apply the updated rows to the target table. Using pipeline attributes, you can keep the user informed of the number of rows read, written, or in

error as the pipeline progresses.

PowerTips is one enhancement that makes PowerBuilder much easier to use. As you move the mouse over an icon on the PowerBar or PainterBars toolbars, the text of that icon automatically displays, so you can easily identify and select the correct icon for the function you want. In Version 3.0, if you displayed the text with the icons, the toolbar expanded right off the edge of the screen. The good news is that you can pass the PowerTips feature on to your users simply by specifying text for your toolbar icons.

Another useful feature that saves time is a conditional modify clause for a DataWindow column. Instead of coding dwModify() functions to change a column's attribute depending on its current value, you can now in the DataWindow painter define values to be assigned to the attribute depending on whether a condition is true or false.

The new version of PowerBuilder is supplied on CD-ROM, which includes three paper manuals.

You can order disks and a paper documentation set for \$220, but for that price you might as well buy a CD-ROM drive.
?log off

```
25sep00 13:32:55 User219455 Session D652.4
    $4.78      0.885 DialUnits File275
        $3.25  1 Type(s) in Format  9
        $7.80  3 Type(s) in Format  5 (UDF)
    $11.05  4 Types
$15.83 Estimated cost File275
    $1.29      0.250 DialUnits File647
        $2.70  1 Type(s) in Format  9
        $2.70  1 Type(s) in Format  4 (UDF)
    $5.40  2 Types
$6.69 Estimated cost File647
    OneSearch, 2 files,  1.135 DialUnits FileOS
$0.20 TYMNET
$22.72 Estimated cost this search
$221.95 Estimated total session cost  11.910 DialUnits
```

Status: Signed Off. (16 minutes)